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(Pages : 14)

Name.....

Reg. No.....

CALICUT UNIVERSITY COMMON ENTRANCE TEST (CU-CET), APRIL 2026

ENVIRONMENTAL SCIENCE

Time : Two Hours

Maximum : 400 Marks

Each question carries 4 marks.

One mark will be deducted for each wrong answer.

1. Environmental Science deals with :

- (A) Only biology.
- (B) Only chemistry.
- (C) Interaction of physical, chemical and biological components.
- (D) Only geology.

2. The outermost layer of atmosphere is :

- (A) Troposphere.
- (B) Stratosphere.
- (C) Mesosphere.
- (D) Exosphere.

3. The ability of ecological systems to maintain stable system properties despite perturbations is called _____.

- (A) Homeostasis.
- (B) Ecological niche.
- (C) Biodiversity.
- (D) Edge effect.

4. Soil formation is known as :

- (A) Sedimentation.
- (B) Pedogenesis.
- (C) Weathering.
- (D) Erosion.

5. Mutualism is :

- (A) Harmful interaction.
- (B) Neutral interaction.
- (C) Beneficial to both species.
- (D) Competitive interaction.

Turn over

6. Xerophytes are adapted to :
- (A) Aquatic habitats.
 - (B) Dry habitats.
 - (C) Saline habitats.
 - (D) Forest habitats.
7. Food chain represents :
- (A) Energy flow.
 - (B) Nutrient storage.
 - (C) Population growth.
 - (D) Climate change.
8. Pyramid of energy is always :
- (A) Inverted.
 - (B) Upright.
 - (C) Circular.
 - (D) Undefined.
9. Nitrogen cycle is a :
- (A) Sedimentary cycle.
 - (B) Gaseous cycle.
 - (C) Mechanical cycle.
 - (D) Artificial cycle.
10. Ecotone is :
- (A) Stable ecosystem.
 - (B) Transitional zone.
 - (C) Ocean zone.
 - (D) Forest zone.
11. Primary source of energy is :
- (A) Moon.
 - (B) Sun.
 - (C) Wind.
 - (D) Water.
12. Coal is a :
- (A) Renewable energy.
 - (B) Fossil fuel.
 - (C) Biofuel.
 - (D) Nuclear fuel.
13. Shale oil is obtained from :
- (A) Sand.
 - (B) Rock.
 - (C) Coal.
 - (D) Soil.

14. Gross Primary Productivity (GPP) of an ecosystem is :
- (A) Net carbon rate gain by plant after respiration losses.
 - (B) Total energy used to convert sugar during growth.
 - (C) Photosynthetic fixation rate of atmospheric CO_2 .
 - (D) Rate of O_2 release through respiration of a plant.
15. Solar cells convert :
- (A) Heat to energy.
 - (B) Light to electricity.
 - (C) Water to energy.
 - (D) Wind to electricity
16. Uranium-235 is used in :
- (A) Thermal plants.
 - (B) Nuclear reactors.
 - (C) Solar panels.
 - (D) Wind turbines.
17. Biogas mainly contains :
- (A) Oxygen.
 - (B) Methane.
 - (C) Nitrogen.
 - (D) Carbon monoxide.
18. Global warming is due to :
- (A) Nitrogen.
 - (B) Oxygen.
 - (C) Greenhouse gases.
 - (D) Hydrogen.
19. Wind energy is :
- (A) Non-renewable.
 - (B) Renewable.
 - (C) Fossil fuel.
 - (D) Nuclear.
20. Tidal energy depends on :
- (A) Earth rotation.
 - (B) Moon gravity.
 - (C) Sun radiation.
 - (D) Wind.

Turn over

21. Pollutant is :
- (A) Useful substance.
 - (B) Harmful substance.
 - (C) Natural element.
 - (D) Pure compound.
22. Ozone layer protects from :
- (A) Visible light.
 - (B) UV radiation.
 - (C) Infrared rays.
 - (D) X-rays.
23. Acid rain is caused by :
- (A) CO_2 .
 - (B) SO_2 and NO_x .
 - (C) Oxygen.
 - (D) Nitrogen.
24. Photochemical smog forms due to :
- (A) Water vapor.
 - (B) Sunlight and pollutants.
 - (C) Oxygen.
 - (D) Soil particles.
25. BOD stands for :
- (A) Biological Oxygen Demand.
 - (B) Basic Oxygen Demand.
 - (C) Biological Oxide Demand.
 - (D) None.
26. Hydrological cycle involves :
- (A) Soil movement.
 - (B) Water circulation.
 - (C) Air circulation.
 - (D) Rock cycle.
27. Chromatography is used for :
- (A) Heating.
 - (B) Separation.
 - (C) Cooling.
 - (D) Mixing.
28. Greenhouse effect leads to :
- (A) Cooling.
 - (B) Warming.
 - (C) Freezing.
 - (D) Condensation.

29. Nitrogen oxides cause :
- (A) Cooling.
 - (B) Acid rain.
 - (C) Photosynthesis.
 - (D) Evaporation.
30. AAS stands for :
- (A) Atomic Absorption Spectroscopy.
 - (B) Advanced Absorption System.
 - (C) Atomic Analysis System.
 - (D) None.
31. Toxicology deals with :
- (A) Nutrients.
 - (B) Toxins.
 - (C) Water.
 - (D) Soil.
32. LD50 indicates :
- (A) Lethal dose.
 - (B) Light density.
 - (C) Liquid density.
 - (D) Load factor.
33. Biomagnification increases :
- (A) Energy.
 - (B) Pollutants in food chain.
 - (C) Water content.
 - (D) Temperature.
34. DDT is :
- (A) Fertilizer.
 - (B) Pesticide.
 - (C) Herbicide.
 - (D) Fungicide.
35. Mercury causes :
- (A) Asthma.
 - (B) Minamata disease.
 - (C) Cholera.
 - (D) Cancer.

Turn over

36. Food adulteration means :

(A) Purification.

(C) Sterilization.

(B) Contamination.

(D) Preservation.

37. Botulism is caused by :

(A) Virus.

(C) Fungus.

(B) Bacteria.

(D) Algae.

38. Preservatives prevent.

(A) Growth.

(C) Mixing.

(B) Spoilage.

(D) Cooling.

39. Bioaccumulation occurs in :

(A) Air.

(C) Soil.

(B) Organisms.

(D) Water

40. Heavy metals include.

(A) Sodium.

(C) Oxygen.

(B) Mercury.

(D) Hydrogen.

41. Earth formed by :

(A) Theory of relativity.

(C) Plate tectonics.

(B) Big Bang.

(D) Weathering.

42. Core of Earth is mainly :

(A) Iron.

(C) Oxygen.

(B) Carbon.

(D) Nitrogen.

43. Igneous rocks form by :

(A) Sedimentation.

(C) Weathering.

(B) Cooling of magma.

(D) Erosion.

44. Plate tectonics explains :
- (A) Climate.
 - (B) Earth movement.
 - (C) Water cycle.
 - (D) Soil formation.
45. Remote sensing uses :
- (A) Sound waves.
 - (B) Light waves.
 - (C) Chemicals.
 - (D) Heat.
46. GIS stands for :
- (A) Global Information System.
 - (B) Geographic Information System.
 - (C) Geological Info System.
 - (D) General Info System.
47. Landsat is used for :
- (A) Agriculture.
 - (B) Remote sensing.
 - (C) Weather.
 - (D) Transport.
48. Weathering is :
- (A) Soil formation.
 - (B) Rock breakdown.
 - (C) Air flow.
 - (D) Water flow.
49. Alpha radiation is :
- (A) High penetration.
 - (B) Low penetration.
 - (C) No penetration.
 - (D) Infinite.
50. Fusion releases :
- (A) Low energy.
 - (B) High energy.
 - (C) No energy.
 - (D) Chemical energy.

Turn over

51. Environmental economics deals with :

- (A) Profit.
- (B) Environment and economy
- (C) Trade only.
- (D) Agriculture.

52. Externalities are :

- (A) Internal costs.
- (B) External costs.
- (C) Free goods.
- (D) Private goods.

53. Forest Act was enacted in :

- (A) 1927.
- (B) 1972.
- (C) 1986.
- (D) 1995.

54. Wildlife Protection Act is :

- (A) 1986.
- (B) 1972.
- (C) 1974.
- (D) 1997.

55. Water Act is :

- (A) 1974.
- (B) 1981.
- (C) 1986.
- (D) 1995.

56. Kyoto Protocol relates to :

- (A) Biodiversity.
- (B) Climate change.
- (C) Water pollution.
- (D) Soil pollution.

57. Ramsar Convention relates to :

- (A) Forests.
- (B) Wetlands.
- (C) Oceans.
- (D) Deserts.

58. CPCB stands for :

- (A) Central Pollution Control Board.
- (B) Climate Board.
- (C) Chemical Board.
- (D) Central Power Board.

59. Rio Summit held in :

(A) 1973.

(B) 1992.

(C) 1987.

(D) 1997.

60. Article 3 ensures :

(A) Equality.

(B) Right to life.

(C) Property.

(D) Work.

61. Study of microbes is :

(A) Ecology.

(B) Microbiology.

(C) Zoology.

(D) Botany.

62. Autoclave is used for :

(A) Heating.

(B) Sterilization.

(C) Cooling.

(D) Mixing.

63. MPN method estimates :

(A) Nutrients.

(B) Microbial count.

(C) Water flow.

(D) Air quality.

64. Bacteria reproduce by :

(A) Fusion.

(B) Binary fission.

(C) Budding.

(D) Fragmentation.

65. Virus requires :

(A) Air.

(B) Host

(C) Soil.

(D) Water.

66. Methanogens produce :

(A) CO_2

(B) CH_4

67. Laminar air flow prevents :

- (A) Heat.
- (B) Contamination.
- (C) Pressure.
- (D) Mixing.

68. AIDS is caused by :

- (A) Bacteria.
- (B) Virus.
- (C) Fungus.
- (D) Algae.

69. Fermentation produces :

- (A) Oxygen.
- (B) Alcohol.
- (C) Nitrogen.
- (D) Water.

70. Soil microbes help in :

- (A) Erosion.
- (B) Nutrient cycling.
- (C) Cooling.
- (D) Drying.

71. Velocity is :

- (A) Distance.
- (B) Speed with direction.
- (C) Acceleration.
- (D) Force.

72. Acceleration is change in :

- (A) Distance.
- (B) Velocity.
- (C) Mass.
- (D) Energy.

73. Bernoulli principle relates to :

- (A) Pressure.
- (B) Heat.
- (C) Light.
- (D) Sound.

74. Pascal's law relates to :

- (A) Pressure.
- (B) Heat.
- (C) Energy.
- (D) Light.

75. Specific gravity compares :
- (A) Mass.
 - (B) Density.
 - (C) Pressure.
 - (D) Volume.
76. Boyle's law relates :
- (A) Pressure and volume.
 - (B) Heat and energy.
 - (C) Mass and density.
 - (D) Velocity and time.
77. Charles law relates :
- (A) Pressure and temp.
 - (B) Volume and temp.
 - (C) Mass and volume.
 - (D) Density and temp.
78. X-rays are :
- (A) Sound waves.
 - (B) Electromagnetic waves.
 - (C) Water waves.
 - (D) Heat waves.
79. Wind forms due to :
- (A) Pressure difference.
 - (B) Gravity.
 - (C) Magnetism.
 - (D) Heat only.
80. Temperature inversion traps :
- (A) Heat.
 - (B) Pollution.
 - (C) Water.
 - (D) Soil.
81. pH measures :
- (A) Temperature.
 - (B) Acidity.
 - (C) Pressure.
 - (D) Density.
82. TDS means :
- (A) Total Dissolved Solids.
 - (B) Total Dry Solids.
 - (C) Total Dense Solids.
 - (D) None.

Turn over

83. BOD indicates :
- (A) Oxygen demand.
 - (B) Carbon demand.
 - (C) Nitrogen demand.
 - (D) Water demand.
84. Primary treatment includes :
- (A) Filtration.
 - (B) Sedimentation.
 - (C) Chlorination.
 - (D) Adsorption.
85. Secondary treatment uses :
- (A) Chemicals.
 - (B) Microbes.
 - (C) Heat.
 - (D) Pressure.
86. Reverse osmosis removes :
- (A) Large particles.
 - (B) Dissolved salts.
 - (C) Microbes only.
 - (D) Heat.
87. Hardness is due to :
- (A) Na.
 - (B) Ca and Mg.
 - (C) K.
 - (D) Cl.
88. Chlorination disinfects :
- (A) Air.
 - (B) Water.
 - (C) Soil.
 - (D) Rock.
89. Turbidity indicates :
- (A) Color.
 - (B) Clarity.
 - (C) Odor.
 - (D) Taste.
90. WHO sets :
- (A) Water standards.
 - (B) Air standards.
 - (C) Soil standards.
 - (D) Noise standards.

91. Sustainable development means :
- (A) Unlimited use.
 - (B) Balanced use.
 - (C) No use.
 - (D) Overuse.
92. Deforestation causes :
- (A) Cooling.
 - (B) Warming.
 - (C) Rainfall increase.
 - (D) Soil formation.
93. Eutrophication leads to :
- (A) Oxygen increase.
 - (B) Oxygen depletion.
 - (C) Cooling.
 - (D) Drying.
94. Smog is :
- (A) Smoke + fog.
 - (B) Dust + air.
 - (C) Heat + water.
 - (D) Air + water
95. El Niño affects :
- (A) Soil.
 - (B) Climate.
 - (C) Rocks.
 - (D) Plants.
96. EIA stands for :
- (A) Environmental Impact Assessment.
 - (B) Environmental Index Analysis.
 - (C) Energy Impact Analysis.
 - (D) None.
97. Zero waste means :
- (A) No waste
 - (B) Minimal waste
 - (C) High waste
 - (D) Chemical waste.

Turn over

98. Urbanization increases :

(A) Pollution.

(C) Rainfall.

(B) Soil fertility.

(D) Oxygen.

99. Industrialization leads to :

(A) Less pollution.

(C) No change.

(B) More pollution.

(D) Cooling.

100. Sustainable energy includes :

(A) Coal.

(C) Oil.

(B) Solar.

(D) Gas.

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(Pages : 16)

Name.....

Reg. No.....

**CALICUT UNIVERSITY CENTRALIZED ENTRANCE TEST (CU-CET)
APRIL 2025**

M.Sc. ENVIRONMENTAL SCIENCE

Time : Two Hours

Maximum : 400 Marks

Each question carries 4 marks.

1 mark will be deducted for each wrong answer.

1. What is the main component of smog ?
 - (a) Nitrogen dioxide.
 - (b) Carbon dioxide.
 - (c) Oxygen.
 - (d) Sulfur dioxide.
2. Environmental resources are :
 - (a) The gross production value of the world's goods and services.
 - (b) The maintenance of productivity of natural and human assets to the next generation.
 - (c) The total amount of solar energy converted into biochemical energy through plant photosynthesis.
 - (d) Resources provided by nature that cannot be allocated unit by unit.
3. Which of the following is a method for reducing water pollution ?
 - (a) Recycling.
 - (b) Using chemical fertilizers.
 - (c) Dumping waste into water bodies.
 - (d) Implementing wastewater treatment.
4. Which of the following is NOT a greenhouse gas ?
 - (a) Carbon dioxide.
 - (b) Methane.
 - (c) Oxygen.
 - (d) Nitrous oxide.
5. Who was the first scientist to coin the term SMOG and to describe the layers of SMOG ?
 - (a) Nikola Tesla.
 - (b) Stephen Hawking.
 - (c) Dr Henry Antoine.
 - (d) Nicolaus Copernicus.

Turn over

6. Which of the following answers applies to renewable natural resource ?
- (a) Once the renewable natural resource is used, it is gone forever.
 - (b) Renewable resources are costly to extract.
 - (c) Renewable resources can be harvested at any rate without harming future supplies.
 - (d) None of the above.
7. What is the term for the process by which carbon is released from the soil into the atmosphere ?
- (a) Carbon fixation.
 - (b) Carbon sequestration.
 - (c) Carbon cycling.
 - (d) Carbon emission.
8. Which of the following particles is called the particulate pollutants ?
- (a) Ozone.
 - (b) Radon.
 - (c) Fly Ash.
 - (d) Ethylene.
9. Which of the following statements is true about the Air Quality Index ?
- (a) It indicates the colour of the air.
 - (b) It determines the intensity of sound and sound pollution.
 - (c) It estimates air pollution mainly sulphur content in the air.
 - (d) It predicts ozone levels in your area.
10. Consider the following statements and identify the right answer, i) According to the Malthusian theory, supply of food grains increases in geometric progression ii) The population grows in arithmetic progression.
- (a) i) only.
 - (b) ii) only.
 - (c) Both.
 - (d) None of the above.
11. At what level a sound becomes physical pain ?
- (a) Above 50 dB.
 - (b) Above 70 dB.
 - (c) Above 80 dB.
 - (d) Above 100 dB.
12. What is the term for the process by which nitrogen is converted into forms that can be used by plants ?
- (a) Nitrogen fixation.
 - (b) Nitrogen deposition.
 - (c) Nitrogen assimilation.
 - (d) Nitrogen cycling.

13. When environmental Lapse Rate (ELR) is less is than Adiabatic Lapse Rate (ALR), which of the following occurs ?
- (a) Super adiabatic lapse rate.
 - (b) Neutral lapse rate..
 - (c) Adiabatic lapse rate.
 - (d) Sub adiabatic lapse rate.
14. Which of the following explain the term economic development ?
- (a) Improvement in the technology involved.
 - (b) Improvement in production.
 - (c) Improvement in distribution system.
 - (d) All of the above.
15. Which of the following air pollution control device has maximum efficiency ?
- (a) Spray tower.
 - (b) Wet cyclonic scrubber.
 - (c) Dynamic precipitator.
 - (d) Electrostatic precipitator.
16. What does the term "externality" refer in the context of environmental economics ?
- (a) Positive impacts of economic activities on the environment.
 - (b) Negative impacts of economic activities on third parties not involved in transaction.
 - (c) Equilibrium state between economic growth and environmental conservation.
 - (d) Direct relationship between economic development and environmental sustainability.
17. The electron emitted in β - radiation originates from where ?
- (a) Inner orbits of atoms.
 - (b) Free electrons existing in nuclei.
 - (c) The decay of a neutron in nuclei.
 - (d) Photon escaping from the nucleus.

Turn over

18. What is the primary goal of sustainable development in the context of economics and the environment ?
- (a) Maximizing economic growth at the expense of environmental conservation.
 - (b) Achieving environmental conservation without regard to economic implications.
 - (c) Balancing economic development with environmental protection to meet the needs of present and future generations.
 - (d) Ensuring that economic growth and environmental conservation remain separate and independent objectives.
19. Air pollution that occurs in sunlight is :
- (a) Reducing smog.
 - (b) Acid rain.
 - (c) Oxidizing smog.
 - (d) Fog.
20. Which of the following is a method for reducing air pollution ?
- (a) Planting trees.
 - (b) Clear-cutting forests.
 - (c) Burning fossil fuels.
 - (d) Dumping waste into water bodies.
21. The quantity of DDT at each trophic level in the food chain :
- (a) Decreases.
 - (b) Remains the same.
 - (c) Increases.
 - (d) Changes.
22. Which of the following is NOT a key objective of the National Green Tribunal (NGT) in India ?
- (a) Providing speedy environmental justice.
 - (b) Handling cases related to environmental protection and conservation.
 - (c) Overseeing the implementation of environmental laws.
 - (d) Promoting industrial development at the expense of environmental concerns.
23. Brewery and sugar factory waste alter the quality of a water body by increasing :
- (a) Temperature.
 - (b) Turbidity.
 - (c) pH.
 - (d) COD and BOD.
24. The wildlife protection Act was enacted in India in which year ?
- (a) 1982.
 - (b) 1972.
 - (c) 1986.
 - (d) 1987.

25. Which of the following is the main reason for producing the atmospheric greenhouse effect ?
- (a) Absorption and re-emission of ultraviolet radiations by the atmosphere.
 - (b) Absorption and re-emission of infrared radiations by the atmosphere.
 - (c) Absorption and re-emission of visible light by the atmosphere.
 - (d) None of the above.
26. Which governmental body is responsible for implementing and enforcing the Environmental Protection Act 1986 in India ?
- (a) Ministry of Environment, Forest and Climate Change (MoEFCC).
 - (b) Ministry of Health and Family Welfare.
 - (c) Ministry of Agriculture and Farmers Welfare.
 - (d) Ministry of Water Resources, River Development and Ganga Rejuvenation.
27. What is the primary objective of the Environmental Protection Act 1986 in India ?
- (a) Promoting industrial growth.
 - (b) Protecting and improving the quality of the environment.
 - (c) Expediting urban development projects.
 - (d) Regulating wildlife conservation.
28. Why the term oscillation is accompanied with El Nino and La Nina ?
- (a) Because its fluctuations are perfectly periodic.
 - (b) Because its fluctuations are not perfectly periodic.
 - (c) Because they recur in the form of regular cycles in climate parameters.
 - (d) Because it is cool phase of ENSO with sea surface temperature in the eastern Pacific below average and air pressures high in the eastern and low in western Pacific.
29. Which year the national environmental tribunal act enacted ?
- (a) 1995.
 - (b) 1998.
 - (c) 1996.
 - (d) 1985.

Turn over

30. Consider the following statement (s) related to the similarity of El Nino and La Nina.

I They are part of a larger cycle called ENSO, or El Niño-Southern Oscillation.

II They are known to alter climate across more than half the planet and dramatically impact weather patterns.

Code :

- (a) Only I. (b) Only II.
(c) Both I and II. (d) Neither I nor II.
31. What is the primary purpose of the National Environment Appellate Authority (NEAA) Act 1997 ?
- (a) To regulate environmental pollution.
(b) To provide a forum for adjudicating appeals against orders of environmental authorities.
(c) To establish a mechanism for environmental monitoring.
(d) To promote environmental conservation awareness.
32. The United Nation's Commission on Sustainable Development (CSD) was started by the UN General Assembly in the year :
- (a) 1995. (b) 1994.
(c) 1993. (d) 1992.
33. What was the main focus of the Stockholm Conference ?
- (a) Climate change. (b) Biodiversity conservation.
(c) Environmental pollution. (d) Renewable energy.
34. Which of the following is a consequence of coral bleaching ?
- (a) Increased coral reef growth. (b) Enhanced marine biodiversity.
(c) Decline in fish populations. (d) Expansion of coral reefs.
35. What is the main source of methane emissions ?
- (a) Rice paddies. (b) Automobiles.
(c) Coal-fired power plants. (d) Deforestation.

36. What are the two main types of drip irrigation ?

- (a) Surface and Subsurface drip irrigation.
- (b) Under and subsurface drip irrigation.
- (c) Top and surface drip irrigation.
- (d) Top and under drip irrigation.

37. What is the term for the process by which pollutants are removed from the atmosphere by precipitation ?

- (a) Condensation.
- (b) Precipitation.
- (c) Deposition.
- (d) Transpiration.

38. Which of the following is a characteristic of an invasive species ?

- (a) It helps increase biodiversity.
- (b) It is native to the ecosystem it invades.
- (c) It outcompetes native species for resources.
- (d) It has a limited impact on the ecosystem.

39. What is the main objective of the Kyoto Protocol ?

- (a) To promote sustainable development.
- (b) To regulate air pollution.
- (c) To reduce greenhouse gas emissions.
- (d) To conserve biodiversity.

40. Which of the following statement is correct regarding SMOG ?

- (a) SMOG is not originates from fog.
- (b) SMOG is formed from smoke.
- (c) SMOG originates from water vapor.
- (d) SMOG originates through the combination of fog and smoke.

41. Which ozone-depleting substances are regulated under the Montreal Protocol ?

- (a) Chlorofluorocarbons (CFCs).
- (b) Hydrochlorofluorocarbons (HCFCs).
- (c) Halons.
- (d) All of the above.

Turn over

42. The atmosphere is naturally composed of many gases which are presented in different ratios. Which gas is present in the highest quantity ?
- (a) Oxygen. (b) Nitrogen.
(c) Hydrogen. (d) Both (1) and (2).
43. Which of the following acts is considered the cornerstone of environmental legislation in India, providing a comprehensive framework for the protection and improvement of the environment ?
- (a) Wildlife Protection Act, 1972.
(b) Forest (Conservation) Act, 1980.
(c) Water (Prevention and Control of Pollution) Act, 1974.
(d) Environment Protection Act, 1986.
44. In order to control the emission of harmful gases into the atmosphere, a catalytic converter can be used. What of the following are the effects of this device ?
- (a) Conversion of carbon monoxide into carbon dioxide.
(b) Conversion of nitric oxides into nitrogen dioxide.
(c) Conversion of hydrocarbons into water and carbon dioxide.
(d) All of these.
45. Which agency is responsible for implementing and enforcing environmental laws at the national level in India ?
- (a) Ministry of Environment and Forests.
(b) Central Pollution Control Board (CPCB).
(c) State Pollution Control Boards (SPCBs).
(d) Ministry of Water Resources, River Development and Ganga Rejuvenation.
46. CFCs (Chlorofluorocarbons) have not been designated for use in refrigerators since they :
- (a) Raise the temperature.
(b) Degrade ozone layer.
(c) Harm the ecosystem.
(d) Harm the human body.

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47. What are the three relevant bands of solar radiation ?

- (a) UV, infrared and Radio waves.
- (b) UY, visible and infrared waves.
- (c) Ultrasonic, infrared and visible light.
- (d) UV, ultrasonic and Gamma rays.

48. What is soil profile ?

- (a) A cross sectional view of the horizons in a soil.
- (b) A front view of the horizons in a soil.
- (c) A cross sectional view of the horizons in rocks.
- (d) A front view of the horizons in rocks.

49. According to the Nebular Hypothesis, how did the Earth form ?

- (a) It was created by a divine being.
- (b) It formed from the collision of two planets.
- (c) It accreted from a spinning disk of gas and dust.
- (d) It originated from the remains of a supernova.

50. What is called for the mixture of all the contents of soil ?

- (a) Erosion.
- (b) Sublimation.
- (c) Degradation.
- (d) Loams.

51. What is called for the movement of surface litter and topsoil from one place to another ?

- (a) Soil submerges.
- (b) Soil degradation.
- (c) Soil erosion.
- (d) Soil pollution.

52. What is used to convert wastelands into agricultural lands ?

- (a) Check dams.
- (b) Water purifier.
- (c) Rain harvesters.
- (d) Gradonies.

53. What is the Earth's innermost layer called ?

- (a) Crust.
- (b) Mantle.
- (c) Outer core.
- (d) Inner core.

Turn over

54. Which among the following does not cause pollution ?
- (a) Automobiles.
 - (b) Thermal power plant.
 - (c) Hydro-electric plant.
 - (d) Nuclear power plant.
55. What is the process by which continents move apart from each other called ?
- (a) Convergence.
 - (b) Divergence.
 - (c) Subduction.
 - (d) Seafloor spreading.
56. What is the primary cause of biodiversity loss ?
- (a) Habitat destruction.
 - (b) Renewable energy sources.
 - (c) Conservation efforts.
 - (d) Population growth.
57. Which of the following is a consequence of ocean acidification ?
- (a) Increased coral reef growth.
 - (b) Decreased shell formation in marine organisms.
 - (c) Expansion of sea ice.
 - (d) Reduction in sea levels.
58. Which mineral group is the most common in igneous rocks ?
- (a) Quartz.
 - (b) Feldspar.
 - (c) Mica.
 - (d) Calcite.
59. "Roaring forties" is the term used to describe which of the following winds ?
- (a) East-to-west air winds in the southern hemisphere.
 - (b) West-to east air winds in the northern hemisphere.
 - (c) East-to-west air winds in the northern hemisphere.
 - (d) West-to-east air winds in the southern hemisphere.
60. Which mineral is composed of silicon dioxide (SiO_2) and is commonly found in both igneous and sedimentary rocks ?
- (a) Quartz.
 - (b) Feldspar.
 - (c) Mica.
 - (d) Calcite.

61. Which of the following indicates the correct order of the principal layers of the earth's atmosphere from top to bottom ?
- (a) Troposphere - Stratosphere - Mesosphere - Thermosphere - Exosphere.
 - (b) Thermosphere - Stratosphere - Troposphere - Mesosphere - Exosphere.
 - (c) Exosphere - Thermosphere - Mesosphere - Stratosphere - Troposphere.
 - (d) Exosphere - Mesosphere - Thermosphere - Stratosphere - Troposphere.
62. Which factor determines the strength of the nuclear charge in an atom ?
- (a) The number of protons.
 - (b) The number of neutrons.
 - (c) The number of electrons.
 - (d) The mass number.
63. Which of the following is a characteristic of a sustainable ecosystem ?
- (a) Rapid depletion of natural resources.
 - (b) Loss of biodiversity.
 - (c) Balance between resource use and regeneration.
 - (d) Increased pollution levels.
64. What is the unit of measurement for mass binding energy ?
- (a) Kilograms.
 - (b) Joules.
 - (c) Volts.
 - (d) Tesla.
65. What is the intermediate zone composed of in aerobic-anaerobic ponds ?
- (a) Algae.
 - (b) Aerobic bacteria.
 - (c) Facultative bacteria.
 - (d) Organic solids.
66. What is a radioactive decay series ?
- (a) A sequence of nuclear reactions in a nuclear reactor.
 - (b) A chain of radioactive decays starting with a radioactive parent nucleus and ending with a stable daughter nucleus.
 - (c) A series of chemical reactions involving radioactive isotopes.
 - (d) A process of converting non-radioactive elements into radioactive elements.

Turn over

67. Bernoulli equation not be applicable for ?
- (a) Viscous flow.
 - (b) Incompressible fluid.
 - (c) Steady flow.
 - (d) Laminar flow.
68. Which of the following is NOT a common platform used for remote sensing ?
- (a) Satellites.
 - (b) Aircraft.
 - (c) Ground-based sensors.
 - (d) Microscopes.
69. A bus moving along a straight path and takes a sharp turn to the right side suddenly. The passenger sitting on the bus will :
- (a) Bent towards right side.
 - (b) Fall in the forward side..
 - (c) Bent towards left side.
 - (d) None of the above
70. Which remote sensing technique uses laser pulses to measure distances to the Earth's surface ?
- (a) Lidar (Light Detection and Ranging).
 - (b) Radar (Radio Detection and Ranging).
 - (c) Sonar (Sound Navigation and Ranging).
 - (d) InSAR (Interferometric Synthetic Aperture Radar).
71. Isotherms are imaginary lines that join places of equal :
- (a) Atmospheric pressure.
 - (b) Temperature.
 - (c) Sunlight.
 - (d) None.
72. What is GIS (Geographic Information System) ?
- (a) A system for tracking global weather patterns.
 - (b) A technology for measuring ocean depths.
 - (c) A tool for capturing, storing, analyzing, and managing spatial or geographic data.
 - (d) A method for studying subatomic particles.
73. Heat transfer takes place according to which of the following law ?
- (a) Newton's second law of motion.
 - (b) First law of thermodynamics.
 - (c) Newton's law of cooling.
 - (d) Second law of thermodynamics.

74. Which GIS application involves modeling and predicting the spread of pollutants in the environment ?
- (a) Habitat mapping.
 - (b) Hydrological modeling.
 - (c) Pollution dispersion modeling.
 - (d) Soil erosion mapping.
75. What is the term for the process by which pollutants accumulate in the tissues of organisms as they move up the food chain ?
- (a) Biomagnification.
 - (b) Eutrophication.
 - (c) Bioaccumulation.
 - (d) Transpiration.
76. What role does GIS play in wildlife management and conservation ?
- (a) By measuring the height of trees in a forest.
 - (b) By tracking the migration patterns of birds and animals.
 - (c) By studying the chemical composition of soil.
 - (d) By analyzing the properties of rocks in a mountain range.
77. In liquids and gases, heat transmission is primarily caused by :
- (a) Convection.
 - (b) Radiation.
 - (c) Conduction.
 - (d) Conduction as well as convection.
78. Which of the following is a characteristic of sustainable agriculture ?
- (a) Heavy use of synthetic fertilizers and pesticides.
 - (b) Monoculture farming.
 - (c) Crop rotation and organic farming practices.
 - (d) Clearing large areas of land for agriculture.
79. Suspended solids are measured by which of the following ?
- (a) Turbidity rod.
 - (b) Gravimetric test.
 - (c) Chromatography.
 - (d) Jackson's turbidity meter.
80. Which of the following is a consequence of overfishing ?
- (a) Increased fish populations.
 - (b) Decline in marine biodiversity.
 - (c) Expansion of coral reefs.
 - (d) Improved water quality.

Turn over

81. 1 TCU (True Color Unit) is equivalent to :
- (a) The color produced by 1 g of platinum cobalt.
 - (b) The color produced by 1 mg of platinum cobalt.
 - (c) The color produced by 1 mg of platinum cobalt in 1L of distilled water.
 - (d) The color produced by 1 mg of platinum cobalt in 1 mL of distilled water.
82. Which of the following statement is wrong regarding turbidity ?
- (a) It is an extent to which light is absorbed by particles in the water.
 - (b) It is expressed in ppm.
 - (c) It depends on the fineness of particle present in the water.
 - (d) Turbidity rod is a laboratory method to measure turbidity.
83. Which of the following is an example of a secondary pollutant ?
- (a) Carbon monoxide (CO).
 - (b) Nitrogen dioxide (NO₂).
 - (c) Ozone (O₃).
 - (d) Volatile organic compounds (VOCs).
84. Which of the following is an example of point source pollution ?
- (a) Fertilizer runoff from agricultural fields.
 - (b) Automobile emissions.
 - (c) Oil spill from a tanker.
 - (d) Pesticide drifts from fields.
85. Which of the following is an example of a persistent environmental pollutant ?
- (a) Carbon dioxide (CO₂).
 - (b) Sulfur dioxide (SO₂).
 - (c) Polychlorinated biphenyls (PCBs).
 - (d) Nitrogen oxides (NO_x).
86. Why burning waste is not an acceptable practice of solid waste management ?
- (a) Because it is very costly.
 - (b) Because it requires modern technologies.
 - (c) Because it causes several environmental issues.
 - (d) Because it requires lot of space.

87. What are non-persistent environmental pollutants ?
- (a) Pollutants that degrade rapidly in the environment.
 - (b) Pollutants that accumulate in the environment over time.
 - (c) Pollutants that are only found in aquatic environments.
 - (d) Pollutants those are resistant to degradation.
88. The microbes those are active at low temperatures :
- (a) Thermophiles.
 - (b) Mesophiles.
 - (c) Psychrophiles.
 - (d) Neutrophiles.
89. Which of the following factor does not affect the dry weather flow ?
- (a) Infiltration of ground water.
 - (b) Population growth.
 - (c) Rate of water supply.
 - (d) Temperature conditions.
90. In ecological terms, what does the term "standing crop" means :
- (a) Total weight of whole organic matter.
 - (b) Total weight of heterotrops.
 - (c) Total area covered by crops.
 - (d) None of the above.
91. The maximum quantity of dissolved oxygen present in wastewater is called :
- (a) Saturated dissolved oxygen.
 - (b) Maximum dissolved oxygen.
 - (c) Optimal dissolved oxygen.
 - (d) Peak dissolved oxygen.
92. Which gas is most abundant in Earth's atmosphere ?
- (a) Oxygen (O_2).
 - (b) Nitrogen (N_2).
 - (c) Carbon dioxide (CO_2).
 - (d) Water vapor (H_2O).
93. What is the approximate percentage of oxygen in the Earth's atmosphere ?
- (a) 21 %.
 - (b) 78 %.
 - (c) 0.04 %.
 - (d) 1 %.

Turn over

94. Darcy's law is valid for only :
- (a) Laminar flow.
 - (b) Turbulent flow.
 - (c) Hydraulic flow.
 - (d) All of the mentioned.
95. Which of the following is the formula for pH calculation ?
- (a) $\log_{10} [H^+]$.
 - (b) $-\log_{10} [H^+]$.
 - (c) $\log_2 [H^+]$.
 - (d) $-\log_2 [H^+]$.
96. What are terricolous animals ?
- (a) Animals that live in a particular territory.
 - (b) Animals that live on high mountains.
 - (c) Animals that live in the soil.
 - (d) Animals that live in tree branches.
97. Which layer of the atmosphere is closest to the Earth's surface and where most weather phenomena occur ?
- (a) Troposphere.
 - (b) Stratosphere.
 - (c) Mesosphere.
 - (d) Thermosphere.
98. Global temperature lowering rate as per Paris agreement is _____.
- (a) 1°C .
 - (b) 1.5°C .
 - (c) 0.5°C .
 - (d) 2°C .
99. What is organic particulate matter in the atmosphere primarily composed of ?
- (a) Carbon-based compounds.
 - (b) Inorganic minerals.
 - (c) Heavy metals.
 - (d) Nitrogen oxides.
100. Method used to increase the water efficient irrigation system ?
- (a) By pouring unnecessary water to the land.
 - (b) By not supplying adequate water.
 - (c) By applying drip irrigation method.
 - (d) By using more manures.

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C 41693

(Pages : 12)

Name.....

Reg. No.....

PG/INTEGRATED PG ENTRANCE EXAMINATION, APRIL 2023

ENVIRONMENTAL SCIENCE

Time : Two Hours

Maximum : 400 Marks

Each question carries 4 marks.

1 mark will be deducted for each wrong answer.

1. The word 'biodiversity' was coined by :
(a) W.G Rosen. (b) E.P OdumJanaki Ammal.
(c) E.O Wilson . (d) E. Haeckel.
2. Space Application Centre is located at :
(a) Nagpur. (b) Bangalore.
(c) Thiruvananthapuram. (d) Ahmedabad.
3. pH value of normal rain water is :
(a) 4.5. (b) 5.5.
(c) 7. (d) 7.5.
4. World Water Day is observe on :
(a) February 22. (b) April 22.
(c) December 22. (d) March 22.
5. Asbestosis is a type of ————— disease caused by exposure to asbestos.
(a) Skin. (b) Eye.
(c) Lungs. (d) Heart.
6. Which one of the following is a non green house gas ?
(a) Methane. (b) Nitrous Oxide.
(c) Sulphur Hexafluoride. (d) Carbon Monoxide.
7. The final stable community in ecological succession is :
(a) Dominant. (b) Sere.
(c) Pioneer. (d) Climax.

Turn over

8. Bishnoi tribes are seen in :

- (a) Rajasthan.
- (b) Madhyapradesh.
- (c) Gujarat.
- (d) Himachal Pradesh.

9. Kyoto protocol is an international treaty :

- (a) To reduce green house gas emissions.
- (b) To reduce plastic pollution.
- (c) To promote afforestation.
- (d) To promote solar energy.

10. *Lokahsamastahsukhinobhavantu* "May all beings everywhere be free and happy." is taken from :

- (a) Vedas.
- (b) Ramayanam.
- (c) Mahabharatham.
- (d) Upanishad.

11. Which state has the highest forest cover in India ?

- (a) Madhyapradesh.
- (b) Arunachalpradesh.
- (c) Orissa.
- (d) Maharashtra.

12. The lower part of thermosphere is called :

- (a) Troposphere.
- (b) Ionosphere.
- (c) Stratosphere.
- (d) All the above.

13. The instrument used to measure plant growth :

- (a) Hygrometer.
- (b) Photometer.
- (c) Auxanometer.
- (d) Multimeter.

14. Veld type grasslands are located at ?

- (a) South America.
- (b) South Africa.
- (c) Australia.
- (d) Britain.

15. _____ is any group of species that exploit the same resources, or that exploit different resources in related ways.

- (a) Guild.
- (b) Niche.
- (c) Races.
- (d) Population.

16. Which of these is not a lake of Kerala ?
- (a) Sasthamkotta. (b) Vembanadu.
(c) Ashtamudi. (d) Pulicat.
17. Limnology is the study of :
- (a) Oceans. (b) Minerals.
(c) Inland Waters. (d) Micro Organisms in Soils.
18. Which conference held at Glasgow :
- (a) COP 25. (b) COP 26.
(c) COP 24. (d) COP 23.
19. An example of symbiotic nitrogen fixing cyanobacteria :
- (a) Nostoc. (b) Rhizobium.
(c) Azotobacter. (d) Nitrobacter.
20. Plants which grow in area where intensity of light is more are called :
- (a) Heliophytes. (b) Sciophytes.
(c) Oxylophytes. (d) Epiphyte.
21. What is deep ecology ?
- (a) Protecting nature for its own sake.
(b) Ecology of deep sea.
(c) Ecology of forest
(d) None of these.
22. Prions is the causative agent of _____ disease.
- (a) Wiel's Disease. (b) Mad cow disease.
(c) Swine Flu Disease. (d) Fowl pox.
23. The convention for the conservation of wetlands held at Iran is known as :
- (a) Vienna. (b) Stockholm.
(c) Ramsar. (d) Biodiversity.

Turn over

24. The Appiko movement, which began as a crusade to protect the trees originated in :
(a) Uttarakhand. (b) Karnataka.
(c) Maharashtra. (d) Gujarat.
25. With which of the following, the Agenda 21' of Rio Summit, 1992 is related to ?
(a) Sustainable development.
(b) Combating the consequences of population explosion.
(c) Mitigation norms of Green House Gases (GHGs) emission.
(d) Technology transfer mechanism to developing countries for 'clean-energy' production.
26. Sacred groves are examples of :
(a) In-situ conservation. (b) In-vivo conservation.
(c) Ex-situ conservation. (d) Ex-vivo conservation.
27. The first green bench was constituted in India in high court of :
(a) Calcutta. (b) Chennai.
(c) Mumbai. (d) Ernakulam.
28. The first National Park of India :
(a) Gir. (b) Kaziranga.
(c) Corbett. (d) Ranthampore.
29. _____ was an American businessman who served as Chairman and CEO of the Union Carbide Corporation at the time of the Bhopal disaster in 1984.
(a) Win Chadha. (b) Ottavio Quattrocchi.
(c) Warren Martin Anderson. (d) Matin Ardbo.
30. Name the disease caused by Cadmium poisoning :
(a) Ouch-ouch disease. (b) Plumbism.
(c) Itai-itai disease. (d) Minamata disease.
31. Which among the following is the World's largest Wetland System ?
(a) Camargue (France). (b) Okavango (Botswana).
(c) Everglades (USA). (d) Pantanal(South America).

32. The 'thickness' of Stratospheric Ozone layer is measured in/on :
(a) Sieverts. (b) Dobson unit.
(c) Melson units. (d) Beaufort Scale.
33. An aquatic plant introduced from America to check pollution turned out to be a troublesome weed in Indian water bodies. The name of this 'invasive alien species' is :
(a) Opuntia. (b) Aegilops.
(c) Eichhornia. (d) Pistia.
34. The highest per capita emitter of Carbon dioxide in the world is :
(a) USA. (b) China.
(c) Qatar. (d) Saudi Arabia.
35. Keibul Lamjoo is :
(a) Wildlife Sanctuary. (b) Floating National Park.
(c) Biosphere Reserve. (d) Community Reserve.
36. The head quarters of IRRI :
(a) Newyork, U.S.A. (b) Paris, France.
(c) Vienna, Austria. (d) Los Banos, Philippines.
37. The use of micro-organism metabolism to remove pollutants such as oil spills in the water bodies is known as :
(a) Biomagnification. (b) Bioremediation.
(c) Biomethanation. (d) Bioreduction.
38. In which of the following forests of India, world's first tiger census was carried out in 1932 ?
(a) Kaziranga Forests. (b) Sariska Forests.
(c) Rantham. (d) Palamu Forests.
39. The Washington Convention whose formal name is abbreviated as CITES is related to which among the following ?
(a) Pesticides. (b) Ozone Depletion.
(c) Endangered Species. (d) Human.

Turn over

40. Earth Hour is organized by _____ ?
(a) UNESCO. (b) Earth Hour Foundation.
(c) World Wildlife Fund. (d) UNEP.
41. Which of the following is the most abundant Green House Gas (GHG) in the earth's atmosphere ?
(a) Nitrogen Dioxide. (b) Carbon Dioxide.
(c) Water Vapour. (d) Sulphur dioxide.
42. Which among the following protocols is also related to the Access and Benefit Sharing (ABS) mechanism ?
(a) Kyoto protocol. (b) Nagoya Protocol.
(c) Geneva Protocol. (d) Cartagena Protocol.
43. Acid rain is capable of damaging the buildings and historic monuments which are made up of rocks such as limestone and marble. Which among the following is the end product of such reaction ?
(a) Quick Lime. (b) Calcium Carbonate.
(c) Calcium Hydroxide. (d) Gypsum.
44. Which among the following chronic lung disease commonly known as 'black lung' disease, leads to reduced life expectancy in coal-miners ?
(a) Pneumoconiosis. (b) Progressive Massive Fibrosis.
(c) Mesothelioma. (d) Collier's Asthma.
45. Which one of the following is a useful biological indicator of Sulphur-dioxide pollution ?
(a) Bryophytes. (b) Lichens.
(c) Pseudomonas. (d) Algal blooms.
46. Which among the following will emit maximum mass of carbon dioxide, when the same quantity is burnt of all of them ?
(a) Gasoline. (b) Natural Gas.
(c) Kerosene. (d) Propane.
47. How many numbers of the Biogeographic zones are present in India ?
(a) 4. (b) 8.
(c) 10. (d) 15.

48. What is the number of Green House Gases, as recognized by the Kyoto Protocol ?
- (a) 3. (b) 4.
(c) 5. (d) 6.
49. Which among the following is the first widely used herbicide ?
- (a) 2, 4-D. (b) TCDD.
(c) Limonene. (d) Vinegar.
50. In context with the Environment, the price charged to deliver municipal solid waste to a landfill, waste-to-energy facility, or recycling facility is known as _____?
- (a) Recycling Fee. (b) Dumping Duty.
(c) Tipping Fee. (d) Material Fee.
51. In which of the following date "World Water Day" is observed ?
- (a) March 20th. (b) March 21st.
(c) March 22nd. (d) March 23rd.
52. In which year Project Tiger was launched in India ?
- (a) 1973. (b) 1970.
(c) 1992. (d) 1995.
53. In which of the following state in India established the country's first carbon dioxide measurement exchange tower ?
- (a) Maharastra. (b) Gujarath.
(c) Kerala. (d) Uttarakhand.
54. National Space Center for "Megha-Tropiques Mission" to study the water cycle in the tropical atmosphere in the context of climate change is located in :
- (a) Italy. (b) France.
(c) Germany. (d) Poland.
55. The tendency of biological systems to resist change and to remain in a state of equilibrium is called :
- (a) Homeostatis. (b) Feedback mechanism.
(c) Ecological efficiency. (d) Carrying capacity.

Turn over

56. 'Silent Spring' is written by :

- (a) E.Odum.
- (b) Vandhana Siva.
- (c) Rachel Carson.
- (d) Wangari Maathai.

57. Public hearing is conducted :

- (a) Prior to site selection.
- (b) Prior to approval of Terms of Reference.
- (c) After preparation of EIA.
- (d) After environmental clearance.

58. In biological systems sulphur is largely bound in :

- (a) Lipids.
- (b) Proteins.
- (c) Nucleic acids.
- (d) Proteins and nucleic acids.

59. Nalgonda technique of fluoride removal involves the use of :

- (a) Aluminium salts.
- (b) Sodium salts.
- (c) Potassium salts.
- (d) Magnesium salts.

60. Laterite soil contains more of :

- (a) Iron and Aluminium.
- (b) Magnesium and Boron.
- (c) Manganese and Silicate.
- (d) Potassium and Lead.

61. Which among the following is India's largest wildlife sanctuary ?

- (a) Dibang Valley.
- (b) Kedarnath Wild Life Sanctuary.
- (c) Kumbhalgarh.
- (d) Indian Wild Ass Sanctuary.

62. Which among the following is India's first state to release a Climate Change Action Plan ?

- (a) Delhi.
- (b) Himachal Pradesh.
- (c) Haryana.
- (d) Kerala.

63. In which of the following the ecological pyramid of numbers is broad in center ?

- (a) Grasslands Ecosystem.
- (b) Pond Ecosystem.
- (c) Parasitic Food chain.
- (d) Forest Ecosystem.

64. Anuradha Sawhney is well known for her work in which of the following fields ?

- (a) Micro Finance.
- (b) Rainwater harvesting.
- (c) Environment Protection.
- (d) Animal rights.

65. In an ecotone, the species which become abundant are called :
(a) Keystone species. (b) Edge species.
(c) Endemic species. (d) Foster species.
66. A population, from where samples are drawn, is called :
(a) Total population. (b) Target population.
(c) Accessible population. (d) Universal population.
67. Which year was declared as International Year of Biodiversity ?
(a) 2002. (b) 2010.
(c) 2020. (d) 1972.
68. What is Eco - mark ?
(a) Label given to recycled products.
(b) Label given to an environment friendly products.
(c) Land mark indicating the boundaries of bio-parks.
(d) Label given to non-recyclable products.
69. Points Calimere Bird sanctuary is located in which of the following states ?
(a) Kerala. (b) Karnataka.
(c) Tamil Nadu. (d) West Bengal.
70. Which freshwater species is added in the Critically Endangered list by International Union for Conservation of Nature (IUCN) recently ?
(a) White tiger shark. (b) Tor remadevii.
(c) Northern pike. (d) Wels catfish.
71. The Ozone Day is observed every year on September 16 as on this day in 1987 the _____ was signed for launching efforts to arrest the depletion of the fragile ozone layer in the stratosphere that prevents the harmful ultra-violet rays of the sun from reaching the earth.
(a) Montreal Protocol. (b) Geneva Protocol.
(c) Kyoto Protocol. (d) Nagoya Protocol.
72. Which among the following body shows anti-green house effect ?
(a) Mars. (b) Venus.
(c) Jupiter. (d) Titan.
73. What is the name of Japan's new imperial era that was began on May 1, 2019 ?
(a) Showa. (b) Taisho.
(c) Reiwa. (d) Heisei.

Turn over

74. What is Carbon Levy ?
- (a) It's a tax levied on jet and shipping fuel to finance climate change mitigation.
 - (b) It's a tax levied on carbon fuel.
 - (c) It's a tax levied on production of fossil fuel and coal.
 - (d) It's a tax levied on production of coal only.
75. Which country will establish the world's first floating nuclear power plant ?
- (a) Japan.
 - (b) France.
 - (c) U.S.A.
 - (d) Russia.
76. In the E-waste generated by the Mobile Phones, which among the following metal is most abundant ?
- (a) Copper.
 - (b) Silver.
 - (c) Palladium.
 - (d) Gold.
77. Who was named 2019 FWA footballer of the year ?
- (a) Virgil Van Dijk.
 - (b) Lionel Messi.
 - (c) Raheem Sterling.
 - (d) Cristiano Ronaldo.
78. In which country scientists have unearthed 220 million-year-old dinosaurs fossils ?
- (a) Maldives.
 - (b) Canada.
 - (c) Argentina.
 - (d) Russia.
79. The United Nations Security Council (UNSC) unanimously passed the resolution to combat _____.
- (a) Terror funding.
 - (b) Desertification.
 - (c) Biological weapons.
 - (d) Climate Change.
80. What is the name of India's first electronic surveillance satellite ?
- (a) WingSat.
 - (b) Sunsat.
 - (c) Emigran.
 - (d) Emisat.
81. Dodo or *Raphus cucullatus*, a flightless bird which got extinct in the 17th century was endemic to which among the following countries ?
- (a) Sri Lanka.
 - (b) Maldives.
 - (c) Mauritius.
 - (d) India.
82. Which of the following was most probably the first metal to be used in India ?
- (a) Iron.
 - (b) Copper.
 - (c) Gold.
 - (d) Silver.

83. In Stone Age, the Microliths were **most commonly** found in which of the following ages ?
(a) Paleolithic. (b) Mesolithic.
(c) Neolithic. (d) Chalcolithic.
84. The Indian Council of Medical Research recently launched the 'MERA India' to eliminate _____ by 2030.
(a) Malaria. (b) Dengue.
(c) Tuberculosis. (d) Typhoid.
85. Which of the following National Park is called "Topslip" ?
(a) Mukurthi National Park.
(b) Mudumalai National Park.
(c) Indira Gandhi Wildlife Sanctuary and National Park.
(d) Palani Hills National Park.
86. Which gas is most popular as laughing gas ?
(a) Ammonia. (b) Nitrogen dioxide.
(c) Nitric oxide. (d) Nitrous oxide.
87. Cotton fibers are made of :
(a) Suberin. (b) Lignin.
(c) Cellulose. (d) Pectin.
88. The 'Concept of Inertia' was developed by ? was awarded Nobel Prize for his path-breaking research and formulation of the:
(a) Albert Einstein. (b) Galileo.
(c) Newton. (d) Archimedes.
89. Which animal never drinks water in its entire life ?
(a) Kangaroo. (b) Kangaroo rat.
(c) Rat. (d) Hippopotamus.
90. "Fish meal" is widely used as which among the following ?
(a) Cost effective Food. (b) Poultry Feed Additive.
(c) Organic Fertilizer. (d) Bird food.
91. What is the name of the world's first Greenhouse Gases Observing Satellite launched by Japan in 2009 ?
(a) Ibuki. (b) Tadami.
(c) Akatsuki. (d) Hayabusa.

Turn over

92. Which among the following is the unit of measurement of the "Ecological Footprint" ?
- (a) Global Hectare . (b) Gallon Per Capita.
(c) Cubic meter. (d) Man H.
93. Which among the following is the correct location of Tropical Forest Research Institute (TFRI) ?
- (a) Jabalpur. (b) Jodhpur.
(c) Midnapore. (d) Bhopal.
94. Which among the following is the dangerous Green House Gas, created by the Waste Water ?
- (a) Nitrogen. (b) Sulfur Dioxide.
(c) Methane. (d) Carbon Dioxide.
95. Official date of Earth Day is on _____.
- (a) April 22. (b) March 22.
(c) May 22. (d) June 22.
96. Which of the following is considered as major source of pollution in rivers of India ?
- (a) Unregulated small scale industry. (b) Untreated sewage.
(c) Agricultural run-off. (d) Thermal power plants.
97. Which of the following type of natural disaster has no definite beginning and end ?
- (a) Earthquakes. (b) Droughts.
(c) Hurricanes. (d) Landsides.
98. Omicron is :
- (a) Virus. (b) Bacteria.
(c) Fungus. (d) Algae.
99. A virus type that is capable of shifting from one computer to another without user interaction is known as a :
- (a) Worm. (b) Trojan.
(c) Logic bomb. (d) Boot sector.
100. Which among the following expert panel related to recommend steps to preserve and rejuvenate the ecologically sensitive Western Ghats ?
- (a) Devendra Pandey. (b) Dr. Madhav Gadgill.
(c) Dr. M. S. Swaminathan. (d) Dr. Vinod Rishi.

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(Pages : 14)

Name.....

Reg. No.....

CALICUT UNIVERSITY COMMON ENTRANCE TEST (CU-CET), APRIL 2026

ENVIRONMENTAL SCIENCE

Time : Two Hours

Maximum : 400 Marks

Each question carries 4 marks.

One mark will be deducted for each wrong answer.

1. Environmental Science deals with :

- (A) Only biology.
- (B) Only chemistry.
- (C) Interaction of physical, chemical and biological components.
- (D) Only geology.

2. The outermost layer of atmosphere is :

- (A) Troposphere.
- (B) Stratosphere.
- (C) Mesosphere.
- (D) Exosphere.

3. The ability of ecological systems to maintain stable system properties despite perturbations is called _____.

- (A) Homeostasis.
- (B) Ecological niche.
- (C) Biodiversity.
- (D) Edge effect.

4. Soil formation is known as :

- (A) Sedimentation.
- (B) Pedogenesis.
- (C) Weathering.
- (D) Erosion.

5. Mutualism is :

- (A) Harmful interaction.
- (B) Neutral interaction.
- (C) Beneficial to both species.
- (D) Competitive interaction.

Turn over

6. Xerophytes are adapted to :
- (A) Aquatic habitats.
 - (B) Dry habitats.
 - (C) Saline habitats.
 - (D) Forest habitats.
7. Food chain represents :
- (A) Energy flow.
 - (B) Nutrient storage.
 - (C) Population growth.
 - (D) Climate change.
8. Pyramid of energy is always :
- (A) Inverted.
 - (B) Upright.
 - (C) Circular.
 - (D) Undefined.
9. Nitrogen cycle is a :
- (A) Sedimentary cycle.
 - (B) Gaseous cycle.
 - (C) Mechanical cycle.
 - (D) Artificial cycle.
10. Ecotone is :
- (A) Stable ecosystem.
 - (B) Transitional zone.
 - (C) Ocean zone.
 - (D) Forest zone.
11. Primary source of energy is :
- (A) Moon.
 - (B) Sun.
 - (C) Wind.
 - (D) Water.
12. Coal is a :
- (A) Renewable energy.
 - (B) Fossil fuel.
 - (C) Biofuel.
 - (D) Nuclear fuel.
13. Shale oil is obtained from :
- (A) Sand.
 - (B) Rock.
 - (C) Coal.
 - (D) Soil.

14. Gross Primary Productivity (GPP) of an ecosystem is :
- (A) Net carbon rate gain by plant after respiration losses.
 - (B) Total energy used to convert sugar during growth.
 - (C) Photosynthetic fixation rate of atmospheric CO_2 .
 - (D) Rate of O_2 release through respiration of a plant.
15. Solar cells convert :
- (A) Heat to energy.
 - (B) Light to electricity.
 - (C) Water to energy.
 - (D) Wind to electricity
16. Uranium-235 is used in :
- (A) Thermal plants.
 - (B) Nuclear reactors.
 - (C) Solar panels.
 - (D) Wind turbines.
17. Biogas mainly contains :
- (A) Oxygen.
 - (B) Methane.
 - (C) Nitrogen.
 - (D) Carbon monoxide.
18. Global warming is due to :
- (A) Nitrogen.
 - (B) Oxygen.
 - (C) Greenhouse gases.
 - (D) Hydrogen.
19. Wind energy is :
- (A) Non-renewable.
 - (B) Renewable.
 - (C) Fossil fuel.
 - (D) Nuclear.
20. Tidal energy depends on :
- (A) Earth rotation.
 - (B) Moon gravity.
 - (C) Sun radiation.
 - (D) Wind.

Turn over

21. Pollutant is :
- (A) Useful substance.
 - (B) Harmful substance.
 - (C) Natural element.
 - (D) Pure compound.
22. Ozone layer protects from :
- (A) Visible light.
 - (B) UV radiation.
 - (C) Infrared rays.
 - (D) X-rays.
23. Acid rain is caused by :
- (A) CO_2 .
 - (B) SO_2 and NO_x .
 - (C) Oxygen.
 - (D) Nitrogen.
24. Photochemical smog forms due to :
- (A) Water vapor.
 - (B) Sunlight and pollutants.
 - (C) Oxygen.
 - (D) Soil particles.
25. BOD stands for :
- (A) Biological Oxygen Demand.
 - (B) Basic Oxygen Demand.
 - (C) Biological Oxide Demand.
 - (D) None.
26. Hydrological cycle involves :
- (A) Soil movement.
 - (B) Water circulation.
 - (C) Air circulation.
 - (D) Rock cycle.
27. Chromatography is used for :
- (A) Heating.
 - (B) Separation.
 - (C) Cooling.
 - (D) Mixing.
28. Greenhouse effect leads to :
- (A) Cooling.
 - (B) Warming.
 - (C) Freezing.
 - (D) Condensation.

29. Nitrogen oxides cause :
- (A) Cooling.
 - (B) Acid rain.
 - (C) Photosynthesis.
 - (D) Evaporation.
30. AAS stands for :
- (A) Atomic Absorption Spectroscopy.
 - (B) Advanced Absorption System.
 - (C) Atomic Analysis System.
 - (D) None.
31. Toxicology deals with :
- (A) Nutrients.
 - (B) Toxins.
 - (C) Water.
 - (D) Soil.
32. LD50 indicates :
- (A) Lethal dose.
 - (B) Light density.
 - (C) Liquid density.
 - (D) Load factor.
33. Biomagnification increases :
- (A) Energy.
 - (B) Pollutants in food chain.
 - (C) Water content.
 - (D) Temperature.
34. DDT is :
- (A) Fertilizer.
 - (B) Pesticide.
 - (C) Herbicide.
 - (D) Fungicide.
35. Mercury causes :
- (A) Asthma.
 - (B) Minamata disease.
 - (C) Cholera.
 - (D) Cancer.

Turn over

36. Food adulteration means :

(A) Purification.

(C) Sterilization.

(B) Contamination.

(D) Preservation.

37. Botulism is caused by :

(A) Virus.

(C) Fungus.

(B) Bacteria.

(D) Algae.

38. Preservatives prevent.

(A) Growth.

(C) Mixing.

(B) Spoilage.

(D) Cooling.

39. Bioaccumulation occurs in :

(A) Air.

(C) Soil.

(B) Organisms.

(D) Water

40. Heavy metals include.

(A) Sodium.

(C) Oxygen.

(B) Mercury.

(D) Hydrogen.

41. Earth formed by :

(A) Theory of relativity.

(C) Plate tectonics.

(B) Big Bang.

(D) Weathering.

42. Core of Earth is mainly :

(A) Iron.

(C) Oxygen.

(B) Carbon.

(D) Nitrogen.

43. Igneous rocks form by :

(A) Sedimentation.

(C) Weathering.

(B) Cooling of magma.

(D) Erosion.

44. Plate tectonics explains :
- (A) Climate.
 - (B) Earth movement.
 - (C) Water cycle.
 - (D) Soil formation.
45. Remote sensing uses :
- (A) Sound waves.
 - (B) Light waves.
 - (C) Chemicals.
 - (D) Heat.
46. GIS stands for :
- (A) Global Information System.
 - (B) Geographic Information System.
 - (C) Geological Info System.
 - (D) General Info System.
47. Landsat is used for :
- (A) Agriculture.
 - (B) Remote sensing.
 - (C) Weather.
 - (D) Transport.
48. Weathering is :
- (A) Soil formation.
 - (B) Rock breakdown.
 - (C) Air flow.
 - (D) Water flow.
49. Alpha radiation is :
- (A) High penetration.
 - (B) Low penetration.
 - (C) No penetration.
 - (D) Infinite.
50. Fusion releases :
- (A) Low energy.
 - (B) High energy.
 - (C) No energy.
 - (D) Chemical energy.

Turn over

51. Environmental economics deals with :

- (A) Profit.
- (B) Environment and economy
- (C) Trade only.
- (D) Agriculture.

52. Externalities are :

- (A) Internal costs.
- (B) External costs.
- (C) Free goods.
- (D) Private goods.

53. Forest Act was enacted in :

- (A) 1927.
- (B) 1972.
- (C) 1986.
- (D) 1995.

54. Wildlife Protection Act is :

- (A) 1986.
- (B) 1972.
- (C) 1974.
- (D) 1997.

55. Water Act is :

- (A) 1974.
- (B) 1981.
- (C) 1986.
- (D) 1995.

56. Kyoto Protocol relates to :

- (A) Biodiversity.
- (B) Climate change.
- (C) Water pollution.
- (D) Soil pollution.

57. Ramsar Convention relates to :

- (A) Forests.
- (B) Wetlands.
- (C) Oceans.
- (D) Deserts.

58. CPCB stands for :

- (A) Central Pollution Control Board.
- (B) Climate Board.
- (C) Chemical Board.
- (D) Central Power Board.

59. Rio Summit held in :

(A) 1973.

(B) 1992.

(C) 1987.

(D) 1997.

60. Article 3 ensures :

(A) Equality.

(B) Right to life.

(C) Property.

(D) Work.

61. Study of microbes is :

(A) Ecology.

(B) Microbiology.

(C) Zoology.

(D) Botany.

62. Autoclave is used for :

(A) Heating.

(B) Sterilization.

(C) Cooling.

(D) Mixing.

63. MPN method estimates :

(A) Nutrients.

(B) Microbial count.

(C) Water flow.

(D) Air quality.

64. Bacteria reproduce by :

(A) Fusion.

(B) Binary fission.

(C) Budding.

(D) Fragmentation.

65. Virus requires :

(A) Air.

(B) Host

(C) Soil.

(D) Water.

66. Methanogens produce :

(A) CO_2

(B) CH_4

67. Laminar air flow prevents :

- (A) Heat.
- (B) Contamination.
- (C) Pressure.
- (D) Mixing.

68. AIDS is caused by :

- (A) Bacteria.
- (B) Virus.
- (C) Fungus.
- (D) Algae.

69. Fermentation produces :

- (A) Oxygen.
- (B) Alcohol.
- (C) Nitrogen.
- (D) Water.

70. Soil microbes help in :

- (A) Erosion.
- (B) Nutrient cycling.
- (C) Cooling.
- (D) Drying.

71. Velocity is :

- (A) Distance.
- (B) Speed with direction.
- (C) Acceleration.
- (D) Force.

72. Acceleration is change in :

- (A) Distance.
- (B) Velocity.
- (C) Mass.
- (D) Energy.

73. Bernoulli principle relates to :

- (A) Pressure.
- (B) Heat.
- (C) Light.
- (D) Sound.

74. Pascal's law relates to :

- (A) Pressure.
- (B) Heat.
- (C) Energy.
- (D) Light.

75. Specific gravity compares :
- (A) Mass.
 - (B) Density.
 - (C) Pressure.
 - (D) Volume.
76. Boyle's law relates :
- (A) Pressure and volume.
 - (B) Heat and energy.
 - (C) Mass and density.
 - (D) Velocity and time.
77. Charles law relates :
- (A) Pressure and temp.
 - (B) Volume and temp.
 - (C) Mass and volume.
 - (D) Density and temp.
78. X-rays are :
- (A) Sound waves.
 - (B) Electromagnetic waves.
 - (C) Water waves.
 - (D) Heat waves.
79. Wind forms due to :
- (A) Pressure difference.
 - (B) Gravity.
 - (C) Magnetism.
 - (D) Heat only.
80. Temperature inversion traps :
- (A) Heat.
 - (B) Pollution.
 - (C) Water.
 - (D) Soil.
81. pH measures :
- (A) Temperature.
 - (B) Acidity.
 - (C) Pressure.
 - (D) Density.
82. TDS means :
- (A) Total Dissolved Solids.
 - (B) Total Dry Solids.
 - (C) Total Dense Solids.
 - (D) None.

Turn over

83. BOD indicates :
- (A) Oxygen demand.
 - (B) Carbon demand.
 - (C) Nitrogen demand.
 - (D) Water demand.
84. Primary treatment includes :
- (A) Filtration.
 - (B) Sedimentation.
 - (C) Chlorination.
 - (D) Adsorption.
85. Secondary treatment uses :
- (A) Chemicals.
 - (B) Microbes.
 - (C) Heat.
 - (D) Pressure.
86. Reverse osmosis removes :
- (A) Large particles.
 - (B) Dissolved salts.
 - (C) Microbes only.
 - (D) Heat.
87. Hardness is due to :
- (A) Na.
 - (B) Ca and Mg.
 - (C) K.
 - (D) Cl.
88. Chlorination disinfects :
- (A) Air.
 - (B) Water.
 - (C) Soil.
 - (D) Rock.
89. Turbidity indicates :
- (A) Color.
 - (B) Clarity.
 - (C) Odor.
 - (D) Taste.
90. WHO sets :
- (A) Water standards.
 - (B) Air standards.
 - (C) Soil standards.
 - (D) Noise standards.

91. Sustainable development means :
- (A) Unlimited use.
 - (B) Balanced use.
 - (C) No use.
 - (D) Overuse.
92. Deforestation causes :
- (A) Cooling.
 - (B) Warming.
 - (C) Rainfall increase.
 - (D) Soil formation.
93. Eutrophication leads to :
- (A) Oxygen increase.
 - (B) Oxygen depletion.
 - (C) Cooling.
 - (D) Drying.
94. Smog is :
- (A) Smoke + fog.
 - (B) Dust + air.
 - (C) Heat + water.
 - (D) Air + water
95. El Niño affects :
- (A) Soil.
 - (B) Climate.
 - (C) Rocks.
 - (D) Plants.
96. EIA stands for :
- (A) Environmental Impact Assessment.
 - (B) Environmental Index Analysis.
 - (C) Energy Impact Analysis.
 - (D) None.
97. Zero waste means :
- (A) No waste
 - (B) Minimal waste
 - (C) High waste
 - (D) Chemical waste.

Turn over

98. Urbanization increases :

(A) Pollution.

(C) Rainfall.

(B) Soil fertility.

(D) Oxygen.

99. Industrialization leads to :

(A) Less pollution.

(C) No change.

(B) More pollution.

(D) Cooling.

100. Sustainable energy includes :

(A) Coal.

(C) Oil.

(B) Solar.

(D) Gas.

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(Pages : 16)

Name.....

Reg. No.....

**CALICUT UNIVERSITY CENTRALIZED ENTRANCE TEST (CU-CET)
APRIL 2025**

M.Sc. ENVIRONMENTAL SCIENCE

Time : Two Hours

Maximum : 400 Marks

Each question carries 4 marks.

1 mark will be deducted for each wrong answer.

1. What is the main component of smog ?
 - (a) Nitrogen dioxide.
 - (b) Carbon dioxide.
 - (c) Oxygen.
 - (d) Sulfur dioxide.
2. Environmental resources are :
 - (a) The gross production value of the world's goods and services.
 - (b) The maintenance of productivity of natural and human assets to the next generation.
 - (c) The total amount of solar energy converted into biochemical energy through plant photosynthesis.
 - (d) Resources provided by nature that cannot be allocated unit by unit.
3. Which of the following is a method for reducing water pollution ?
 - (a) Recycling.
 - (b) Using chemical fertilizers.
 - (c) Dumping waste into water bodies.
 - (d) Implementing wastewater treatment.
4. Which of the following is NOT a greenhouse gas ?
 - (a) Carbon dioxide.
 - (b) Methane.
 - (c) Oxygen.
 - (d) Nitrous oxide.
5. Who was the first scientist to coin the term SMOG and to describe the layers of SMOG ?
 - (a) Nikola Tesla.
 - (b) Stephen Hawking.
 - (c) Dr Henry Antoine.
 - (d) Nicolaus Copernicus.

Turn over

6. Which of the following answers applies to renewable natural resource ?
- (a) Once the renewable natural resource is used, it is gone forever.
 - (b) Renewable resources are costly to extract.
 - (c) Renewable resources can be harvested at any rate without harming future supplies.
 - (d) None of the above.
7. What is the term for the process by which carbon is released from the soil into the atmosphere ?
- (a) Carbon fixation.
 - (b) Carbon sequestration.
 - (c) Carbon cycling.
 - (d) Carbon emission.
8. Which of the following particles is called the particulate pollutants ?
- (a) Ozone.
 - (b) Radon.
 - (c) Fly Ash.
 - (d) Ethylene.
9. Which of the following statements is true about the Air Quality Index ?
- (a) It indicates the colour of the air.
 - (b) It determines the intensity of sound and sound pollution.
 - (c) It estimates air pollution mainly sulphur content in the air.
 - (d) It predicts ozone levels in your area.
10. Consider the following statements and identify the right answer, i) According to the Malthusian theory, supply of food grains increases in geometric progression ii) The population grows in arithmetic progression.
- (a) i) only.
 - (b) ii) only.
 - (c) Both.
 - (d) None of the above.
11. At what level a sound becomes physical pain ?
- (a) Above 50 dB.
 - (b) Above 70 dB.
 - (c) Above 80 dB.
 - (d) Above 100 dB.
12. What is the term for the process by which nitrogen is converted into forms that can be used by plants ?
- (a) Nitrogen fixation.
 - (b) Nitrogen deposition.
 - (c) Nitrogen assimilation.
 - (d) Nitrogen cycling.

13. When environmental Lapse Rate (ELR) is less is than Adiabatic Lapse Rate (ALR), which of the following occurs ?
- (a) Super adiabatic lapse rate.
 - (b) Neutral lapse rate..
 - (c) Adiabatic lapse rate.
 - (d) Sub adiabatic lapse rate.
14. Which of the following explain the term economic development ?
- (a) Improvement in the technology involved.
 - (b) Improvement in production.
 - (c) Improvement in distribution system.
 - (d) All of the above.
15. Which of the following air pollution control device has maximum efficiency ?
- (a) Spray tower.
 - (b) Wet cyclonic scrubber.
 - (c) Dynamic precipitator.
 - (d) Electrostatic precipitator.
16. What does the term "externality" refer in the context of environmental economics ?
- (a) Positive impacts of economic activities on the environment.
 - (b) Negative impacts of economic activities on third parties not involved in transaction.
 - (c) Equilibrium state between economic growth and environmental conservation.
 - (d) Direct relationship between economic development and environmental sustainability.
17. The electron emitted in β - radiation originates from where ?
- (a) Inner orbits of atoms.
 - (b) Free electrons existing in nuclei.
 - (c) The decay of a neutron in nuclei.
 - (d) Photon escaping from the nucleus.

Turn over

18. What is the primary goal of sustainable development in the context of economics and the environment ?
- (a) Maximizing economic growth at the expense of environmental conservation.
 - (b) Achieving environmental conservation without regard to economic implications.
 - (c) Balancing economic development with environmental protection to meet the needs of present and future generations.
 - (d) Ensuring that economic growth and environmental conservation remain separate and independent objectives.
19. Air pollution that occurs in sunlight is :
- (a) Reducing smog.
 - (b) Acid rain.
 - (c) Oxidizing smog.
 - (d) Fog.
20. Which of the following is a method for reducing air pollution ?
- (a) Planting trees.
 - (b) Clear-cutting forests.
 - (c) Burning fossil fuels.
 - (d) Dumping waste into water bodies.
21. The quantity of DDT at each trophic level in the food chain :
- (a) Decreases.
 - (b) Remains the same.
 - (c) Increases.
 - (d) Changes.
22. Which of the following is NOT a key objective of the National Green Tribunal (NGT) in India ?
- (a) Providing speedy environmental justice.
 - (b) Handling cases related to environmental protection and conservation.
 - (c) Overseeing the implementation of environmental laws.
 - (d) Promoting industrial development at the expense of environmental concerns.
23. Brewery and sugar factory waste alter the quality of a water body by increasing :
- (a) Temperature.
 - (b) Turbidity.
 - (c) pH.
 - (d) COD and BOD.
24. The wildlife protection Act was enacted in India in which year ?
- (a) 1982.
 - (b) 1972.
 - (c) 1986.
 - (d) 1987.

25. Which of the following is the main reason for producing the atmospheric greenhouse effect ?
- (a) Absorption and re-emission of ultraviolet radiations by the atmosphere.
 - (b) Absorption and re-emission of infrared radiations by the atmosphere.
 - (c) Absorption and re-emission of visible light by the atmosphere.
 - (d) None of the above.
26. Which governmental body is responsible for implementing and enforcing the Environmental Protection Act 1986 in India ?
- (a) Ministry of Environment, Forest and Climate Change (MoEFCC).
 - (b) Ministry of Health and Family Welfare.
 - (c) Ministry of Agriculture and Farmers Welfare.
 - (d) Ministry of Water Resources, River Development and Ganga Rejuvenation.
27. What is the primary objective of the Environmental Protection Act 1986 in India ?
- (a) Promoting industrial growth.
 - (b) Protecting and improving the quality of the environment.
 - (c) Expediting urban development projects.
 - (d) Regulating wildlife conservation.
28. Why the term oscillation is accompanied with El Nino and La Nina ?
- (a) Because its fluctuations are perfectly periodic.
 - (b) Because its fluctuations are not perfectly periodic.
 - (c) Because they recur in the form of regular cycles in climate parameters.
 - (d) Because it is cool phase of ENSO with sea surface temperature in the eastern Pacific below average and air pressures high in the eastern and low in western Pacific.
29. Which year the national environmental tribunal act enacted ?
- (a) 1995.
 - (b) 1998.
 - (c) 1996.
 - (d) 1985.

Turn over

30. Consider the following statement (s) related to the similarity of El Nino and La Nina.

I They are part of a larger cycle called ENSO, or El Niño-Southern Oscillation.

II They are known to alter climate across more than half the planet and dramatically impact weather patterns.

Code :

- (a) Only I. (b) Only II.
(c) Both I and II. (d) Neither I nor II.
31. What is the primary purpose of the National Environment Appellate Authority (NEAA) Act 1997 ?
- (a) To regulate environmental pollution.
(b) To provide a forum for adjudicating appeals against orders of environmental authorities.
(c) To establish a mechanism for environmental monitoring.
(d) To promote environmental conservation awareness.
32. The United Nation's Commission on Sustainable Development (CSD) was started by the UN General Assembly in the year :
- (a) 1995. (b) 1994.
(c) 1993. (d) 1992.
33. What was the main focus of the Stockholm Conference ?
- (a) Climate change. (b) Biodiversity conservation.
(c) Environmental pollution. (d) Renewable energy.
34. Which of the following is a consequence of coral bleaching ?
- (a) Increased coral reef growth. (b) Enhanced marine biodiversity.
(c) Decline in fish populations. (d) Expansion of coral reefs.
35. What is the main source of methane emissions ?
- (a) Rice paddies. (b) Automobiles.
(c) Coal-fired power plants. (d) Deforestation.

36. What are the two main types of drip irrigation ?

- (a) Surface and Subsurface drip irrigation.
- (b) Under and subsurface drip irrigation.
- (c) Top and surface drip irrigation.
- (d) Top and under drip irrigation.

37. What is the term for the process by which pollutants are removed from the atmosphere by precipitation ?

- (a) Condensation.
- (b) Precipitation.
- (c) Deposition.
- (d) Transpiration.

38. Which of the following is a characteristic of an invasive species ?

- (a) It helps increase biodiversity.
- (b) It is native to the ecosystem it invades.
- (c) It outcompetes native species for resources.
- (d) It has a limited impact on the ecosystem.

39. What is the main objective of the Kyoto Protocol ?

- (a) To promote sustainable development.
- (b) To regulate air pollution.
- (c) To reduce greenhouse gas emissions.
- (d) To conserve biodiversity.

40. Which of the following statement is correct regarding SMOG ?

- (a) SMOG is not originates from fog.
- (b) SMOG is formed from smoke.
- (c) SMOG originates from water vapor.
- (d) SMOG originates through the combination of fog and smoke.

41. Which ozone-depleting substances are regulated under the Montreal Protocol ?

- (a) Chlorofluorocarbons (CFCs).
- (b) Hydrochlorofluorocarbons (HCFCs).
- (c) Halons.
- (d) All of the above.

Turn over

42. The atmosphere is naturally composed of many gases which are presented in different ratios. Which gas is present in the highest quantity ?
- (a) Oxygen. (b) Nitrogen.
(c) Hydrogen. (d) Both (1) and (2).
43. Which of the following acts is considered the cornerstone of environmental legislation in India, providing a comprehensive framework for the protection and improvement of the environment ?
- (a) Wildlife Protection Act, 1972.
(b) Forest (Conservation) Act, 1980.
(c) Water (Prevention and Control of Pollution) Act, 1974.
(d) Environment Protection Act, 1986.
44. In order to control the emission of harmful gases into the atmosphere, a catalytic converter can be used. What of the following are the effects of this device ?
- (a) Conversion of carbon monoxide into carbon dioxide.
(b) Conversion of nitric oxides into nitrogen dioxide.
(c) Conversion of hydrocarbons into water and carbon dioxide.
(d) All of these.
45. Which agency is responsible for implementing and enforcing environmental laws at the national level in India ?
- (a) Ministry of Environment and Forests.
(b) Central Pollution Control Board (CPCB).
(c) State Pollution Control Boards (SPCBs).
(d) Ministry of Water Resources, River Development and Ganga Rejuvenation.
46. CFCs (Chlorofluorocarbons) have not been designated for use in refrigerators since they :
- (a) Raise the temperature.
(b) Degrade ozone layer.
(c) Harm the ecosystem.
(d) Harm the human body.

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47. What are the three relevant bands of solar radiation ?

- (a) UV, infrared and Radio waves.
- (b) UY, visible and infrared waves.
- (c) Ultrasonic, infrared and visible light.
- (d) UV, ultrasonic and Gamma rays.

48. What is soil profile ?

- (a) A cross sectional view of the horizons in a soil.
- (b) A front view of the horizons in a soil.
- (c) A cross sectional view of the horizons in rocks.
- (d) A front view of the horizons in rocks.

49. According to the Nebular Hypothesis, how did the Earth form ?

- (a) It was created by a divine being.
- (b) It formed from the collision of two planets.
- (c) It accreted from a spinning disk of gas and dust.
- (d) It originated from the remains of a supernova.

50. What is called for the mixture of all the contents of soil ?

- (a) Erosion.
- (b) Sublimation.
- (c) Degradation.
- (d) Loams.

51. What is called for the movement of surface litter and topsoil from one place to another ?

- (a) Soil submerges.
- (b) Soil degradation.
- (c) Soil erosion.
- (d) Soil pollution.

52. What is used to convert wastelands into agricultural lands ?

- (a) Check dams.
- (b) Water purifier.
- (c) Rain harvesters.
- (d) Gradonies.

53. What is the Earth's innermost layer called ?

- (a) Crust.
- (b) Mantle.
- (c) Outer core.
- (d) Inner core.

Turn over

54. Which among the following does not cause pollution ?
- (a) Automobiles.
 - (b) Thermal power plant.
 - (c) Hydro-electric plant.
 - (d) Nuclear power plant.
55. What is the process by which continents move apart from each other called ?
- (a) Convergence.
 - (b) Divergence.
 - (c) Subduction.
 - (d) Seafloor spreading.
56. What is the primary cause of biodiversity loss ?
- (a) Habitat destruction.
 - (b) Renewable energy sources.
 - (c) Conservation efforts.
 - (d) Population growth.
57. Which of the following is a consequence of ocean acidification ?
- (a) Increased coral reef growth.
 - (b) Decreased shell formation in marine organisms.
 - (c) Expansion of sea ice.
 - (d) Reduction in sea levels.
58. Which mineral group is the most common in igneous rocks ?
- (a) Quartz.
 - (b) Feldspar.
 - (c) Mica.
 - (d) Calcite.
59. "Roaring forties" is the term used to describe which of the following winds ?
- (a) East-to-west air winds in the southern hemisphere.
 - (b) West-to east air winds in the northern hemisphere.
 - (c) East-to-west air winds in the northern hemisphere.
 - (d) West-to-east air winds in the southern hemisphere.
60. Which mineral is composed of silicon dioxide (SiO_2) and is commonly found in both igneous and sedimentary rocks ?
- (a) Quartz.
 - (b) Feldspar.
 - (c) Mica.
 - (d) Calcite.

61. Which of the following indicates the correct order of the principal layers of the earth's atmosphere from top to bottom ?
- (a) Troposphere - Stratosphere - Mesosphere - Thermosphere - Exosphere.
 - (b) Thermosphere - Stratosphere - Troposphere - Mesosphere - Exosphere.
 - (c) Exosphere - Thermosphere - Mesosphere - Stratosphere - Troposphere.
 - (d) Exosphere - Mesosphere - Thermosphere - Stratosphere - Troposphere.
62. Which factor determines the strength of the nuclear charge in an atom ?
- (a) The number of protons.
 - (b) The number of neutrons.
 - (c) The number of electrons.
 - (d) The mass number.
63. Which of the following is a characteristic of a sustainable ecosystem ?
- (a) Rapid depletion of natural resources.
 - (b) Loss of biodiversity.
 - (c) Balance between resource use and regeneration.
 - (d) Increased pollution levels.
64. What is the unit of measurement for mass binding energy ?
- (a) Kilograms.
 - (b) Joules.
 - (c) Volts.
 - (d) Tesla.
65. What is the intermediate zone composed of in aerobic-anaerobic ponds ?
- (a) Algae.
 - (b) Aerobic bacteria.
 - (c) Facultative bacteria.
 - (d) Organic solids.
66. What is a radioactive decay series ?
- (a) A sequence of nuclear reactions in a nuclear reactor.
 - (b) A chain of radioactive decays starting with a radioactive parent nucleus and ending with a stable daughter nucleus.
 - (c) A series of chemical reactions involving radioactive isotopes.
 - (d) A process of converting non-radioactive elements into radioactive elements.

Turn over

67. Bernoulli equation not be applicable for ?
- (a) Viscous flow.
 - (b) Incompressible fluid.
 - (c) Steady flow.
 - (d) Laminar flow.
68. Which of the following is NOT a common platform used for remote sensing ?
- (a) Satellites.
 - (b) Aircraft.
 - (c) Ground-based sensors.
 - (d) Microscopes.
69. A bus moving along a straight path and takes a sharp turn to the right side suddenly. The passenger sitting on the bus will :
- (a) Bent towards right side.
 - (b) Fall in the forward side..
 - (c) Bent towards left side.
 - (d) None of the above
70. Which remote sensing technique uses laser pulses to measure distances to the Earth's surface ?
- (a) Lidar (Light Detection and Ranging).
 - (b) Radar (Radio Detection and Ranging).
 - (c) Sonar (Sound Navigation and Ranging).
 - (d) InSAR (Interferometric Synthetic Aperture Radar).
71. Isotherms are imaginary lines that join places of equal :
- (a) Atmospheric pressure.
 - (b) Temperature.
 - (c) Sunlight.
 - (d) None.
72. What is GIS (Geographic Information System) ?
- (a) A system for tracking global weather patterns.
 - (b) A technology for measuring ocean depths.
 - (c) A tool for capturing, storing, analyzing, and managing spatial or geographic data.
 - (d) A method for studying subatomic particles.
73. Heat transfer takes place according to which of the following law ?
- (a) Newton's second law of motion.
 - (b) First law of thermodynamics.
 - (c) Newton's law of cooling.
 - (d) Second law of thermodynamics.

74. Which GIS application involves modeling and predicting the spread of pollutants in the environment ?
- (a) Habitat mapping. (b) Hydrological modeling.
(c) Pollution dispersion modeling. (d) Soil erosion mapping.
75. What is the term for the process by which pollutants accumulate in the tissues of organisms as they move up the food chain ?
- (a) Biomagnification. (b) Eutrophication.
(c) Bioaccumulation. (d) Transpiration.
76. What role does GIS play in wildlife management and conservation ?
- (a) By measuring the height of trees in a forest.
(b) By tracking the migration patterns of birds and animals.
(c) By studying the chemical composition of soil.
(d) By analyzing the properties of rocks in a mountain range.
77. In liquids and gases, heat transmission is primarily caused by :
- (a) Convection. (b) Radiation.
(c) Conduction. (d) Conduction as well as convection.
78. Which of the following is a characteristic of sustainable agriculture ?
- (a) Heavy use of synthetic fertilizers and pesticides.
(b) Monoculture farming.
(c) Crop rotation and organic farming practices.
(d) Clearing large areas of land for agriculture.
79. Suspended solids are measured by which of the following ?
- (a) Turbidity rod. (b) Gravimetric test.
(c) Chromatography. (d) Jackson's turbidity meter.
80. Which of the following is a consequence of overfishing ?
- (a) Increased fish populations. (b) Decline in marine biodiversity.
(c) Expansion of coral reefs. (d) Improved water quality.

Turn over

81. 1 TCU (True Color Unit) is equivalent to :
- (a) The color produced by 1 g of platinum cobalt.
 - (b) The color produced by 1 mg of platinum cobalt.
 - (c) The color produced by 1 mg of platinum cobalt in 1L of distilled water.
 - (d) The color produced by 1 mg of platinum cobalt in 1 mL of distilled water.
82. Which of the following statement is wrong regarding turbidity ?
- (a) It is an extent to which light is absorbed by particles in the water.
 - (b) It is expressed in ppm.
 - (c) It depends on the fineness of particle present in the water.
 - (d) Turbidity rod is a laboratory method to measure turbidity.
83. Which of the following is an example of a secondary pollutant ?
- (a) Carbon monoxide (CO).
 - (b) Nitrogen dioxide (NO₂).
 - (c) Ozone (O₃).
 - (d) Volatile organic compounds (VOCs).
84. Which of the following is an example of point source pollution ?
- (a) Fertilizer runoff from agricultural fields.
 - (b) Automobile emissions.
 - (c) Oil spill from a tanker.
 - (d) Pesticide drifts from fields.
85. Which of the following is an example of a persistent environmental pollutant ?
- (a) Carbon dioxide (CO₂).
 - (b) Sulfur dioxide (SO₂).
 - (c) Polychlorinated biphenyls (PCBs).
 - (d) Nitrogen oxides (NO_x).
86. Why burning waste is not an acceptable practice of solid waste management ?
- (a) Because it is very costly.
 - (b) Because it requires modern technologies.
 - (c) Because it causes several environmental issues.
 - (d) Because it requires lot of space.

87. What are non-persistent environmental pollutants ?
- (a) Pollutants that degrade rapidly in the environment.
 - (b) Pollutants that accumulate in the environment over time.
 - (c) Pollutants that are only found in aquatic environments.
 - (d) Pollutants those are resistant to degradation.
88. The microbes those are active at low temperatures :
- (a) Thermophiles.
 - (b) Mesophiles.
 - (c) Psychrophiles.
 - (d) Neutrophiles.
89. Which of the following factor does not affect the dry weather flow ?
- (a) Infiltration of ground water.
 - (b) Population growth.
 - (c) Rate of water supply.
 - (d) Temperature conditions.
90. In ecological terms, what does the term "standing crop" means :
- (a) Total weight of whole organic matter.
 - (b) Total weight of heterotrops.
 - (c) Total area covered by crops.
 - (d) None of the above.
91. The maximum quantity of dissolved oxygen present in wastewater is called :
- (a) Saturated dissolved oxygen.
 - (b) Maximum dissolved oxygen.
 - (c) Optimal dissolved oxygen.
 - (d) Peak dissolved oxygen.
92. Which gas is most abundant in Earth's atmosphere ?
- (a) Oxygen (O_2).
 - (b) Nitrogen (N_2).
 - (c) Carbon dioxide (CO_2).
 - (d) Water vapor (H_2O).
93. What is the approximate percentage of oxygen in the Earth's atmosphere ?
- (a) 21 %.
 - (b) 78 %.
 - (c) 0.04 %.
 - (d) 1 %.

Turn over

94. Darcy's law is valid for only :
- (a) Laminar flow.
 - (b) Turbulent flow.
 - (c) Hydraulic flow.
 - (d) All of the mentioned.
95. Which of the following is the formula for pH calculation ?
- (a) $\log_{10} [H^+]$.
 - (b) $-\log_{10} [H^+]$.
 - (c) $\log_2 [H^+]$.
 - (d) $-\log_2 [H^+]$.
96. What are terricolous animals ?
- (a) Animals that live in a particular territory.
 - (b) Animals that live on high mountains.
 - (c) Animals that live in the soil.
 - (d) Animals that live in tree branches.
97. Which layer of the atmosphere is closest to the Earth's surface and where most weather phenomena occur ?
- (a) Troposphere.
 - (b) Stratosphere.
 - (c) Mesosphere.
 - (d) Thermosphere.
98. Global temperature lowering rate as per Paris agreement is _____.
- (a) 1°C .
 - (b) 1.5°C .
 - (c) 0.5°C .
 - (d) 2°C .
99. What is organic particulate matter in the atmosphere primarily composed of ?
- (a) Carbon-based compounds.
 - (b) Inorganic minerals.
 - (c) Heavy metals.
 - (d) Nitrogen oxides.
100. Method used to increase the water efficient irrigation system ?
- (a) By pouring unnecessary water to the land.
 - (b) By not supplying adequate water.
 - (c) By applying drip irrigation method.
 - (d) By using more manures.

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(Pages : 12)

Name.....

Reg. No.....

PG/INTEGRATED PG ENTRANCE EXAMINATION, APRIL 2023

ENVIRONMENTAL SCIENCE

Time : Two Hours

Maximum : 400 Marks

Each question carries 4 marks.

1 mark will be deducted for each wrong answer.

1. The word 'biodiversity' was coined by :
(a) W.G Rosen. (b) E.P OdumJanaki Ammal.
(c) E.O Wilson . (d) E. Haeckel.
2. Space Application Centre is located at :
(a) Nagpur. (b) Bangalore.
(c) Thiruvananthapuram. (d) Ahmedabad.
3. pH value of normal rain water is :
(a) 4.5. (b) 5.5.
(c) 7. (d) 7.5.
4. World Water Day is observe on :
(a) February 22. (b) April 22.
(c) December 22. (d) March 22.
5. Asbestosis is a type of _____ disease caused by exposure to asbestos.
(a) Skin. (b) Eye.
(c) Lungs. (d) Heart.
6. Which one of the following is a non green house gas ?
(a) Methane. (b) Nitrous Oxide.
(c) Sulphur Hexafluoride. (d) Carbon Monoxide.
7. The final stable community in ecological succession is :
(a) Dominant. (b) Sere.
(c) Pioneer. (d) Climax.

Turn over

8. Bishnoi tribes are seen in :

- (a) Rajasthan.
- (b) Madhyapradesh.
- (c) Gujarat.
- (d) Himachal Pradesh.

9. Kyoto protocol is an international treaty :

- (a) To reduce green house gas emissions.
- (b) To reduce plastic pollution.
- (c) To promote afforestation.
- (d) To promote solar energy.

10. *Lokahsamastahsukhinobhavantu* "May all beings everywhere be free and happy." is taken from :

- (a) Vedas.
- (b) Ramayanam.
- (c) Mahabharatham.
- (d) Upanishad.

11. Which state has the highest forest cover in India ?

- (a) Madhyapradesh.
- (b) Arunachalpradesh.
- (c) Orissa.
- (d) Maharashtra.

12. The lower part of thermosphere is called :

- (a) Troposphere.
- (b) Ionosphere.
- (c) Stratosphere.
- (d) All the above.

13. The instrument used to measure plant growth :

- (a) Hygrometer.
- (b) Photometer.
- (c) Auxanometer.
- (d) Multimeter.

14. Veld type grasslands are located at ?

- (a) South America.
- (b) South Africa.
- (c) Australia.
- (d) Britain.

15. _____ is any group of species that exploit the same resources, or that exploit different resources in related ways.

- (a) Guild.
- (b) Niche.
- (c) Races.
- (d) Population.

16. Which of these is not a lake of Kerala ?
- (a) Sasthamkotta. (b) Vembanadu.
(c) Ashtamudi. (d) Pulicat.
17. Limnology is the study of :
- (a) Oceans. (b) Minerals.
(c) Inland Waters. (d) Micro Organisms in Soils.
18. Which conference held at Glasgow :
- (a) COP 25. (b) COP 26.
(c) COP 24. (d) COP 23.
19. An example of symbiotic nitrogen fixing cyanobacteria :
- (a) Nostoc. (b) Rhizobium.
(c) Azotobacter. (d) Nitrobacter.
20. Plants which grow in area where intensity of light is more are called :
- (a) Heliophytes. (b) Sciophytes.
(c) Oxylophytes. (d) Epiphyte.
21. What is deep ecology ?
- (a) Protecting nature for its own sake.
(b) Ecology of deep sea.
(c) Ecology of forest
(d) None of these.
22. Prions is the causative agent of _____ disease.
- (a) Wiel's Disease. (b) Mad cow disease.
(c) Swine Flu Disease. (d) Fowl pox.
23. The convention for the conservation of wetlands held at Iran is known as :
- (a) Vienna. (b) Stockholm.
(c) Ramsar. (d) Biodiversity.

Turn over

24. The Appiko movement, which began as a crusade to protect the trees originated in :
(a) Uttarakhand. (b) Karnataka.
(c) Maharashtra. (d) Gujarat.
25. With which of the following, the Agenda 21' of Rio Summit, 1992 is related to ?
(a) Sustainable development.
(b) Combating the consequences of population explosion.
(c) Mitigation norms of Green House Gases (GHGs) emission.
(d) Technology transfer mechanism to developing countries for 'clean-energy' production.
26. Sacred groves are examples of :
(a) In-situ conservation. (b) In-vivo conservation.
(c) Ex-situ conservation. (d) Ex-vivo conservation.
27. The first green bench was constituted in India in high court of :
(a) Calcutta. (b) Chennai.
(c) Mumbai. (d) Ernakulam.
28. The first National Park of India :
(a) Gir. (b) Kaziranga.
(c) Corbett. (d) Ranthampore.
29. _____ was an American businessman who served as Chairman and CEO of the Union Carbide Corporation at the time of the Bhopal disaster in 1984.
(a) Win Chadha. (b) Ottavio Quattrocchi.
(c) Warren Martin Anderson. (d) Matin Ardbo.
30. Name the disease caused by Cadmium poisoning :
(a) Ouch-ouch disease. (b) Plumbism.
(c) Itai-itai disease. (d) Minamata disease.
31. Which among the following is the World's largest Wetland System ?
(a) Camargue (France). (b) Okavango (Botswana).
(c) Everglades (USA). (d) Pantanal(South America).

32. The 'thickness' of Stratospheric Ozone layer is measured in/on :
- (a) Sieverts. (b) Dobson unit.
(c) Melson units. (d) Beaufort Scale.
33. An aquatic plant introduced from America to check pollution turned out to be a troublesome weed in Indian water bodies. The name of this 'invasive alien species' is :
- (a) Opuntia. (b) Aegilops.
(c) Eichhornia. (d) Pistia.
34. The highest per capita emitter of Carbon dioxide in the world is :
- (a) USA. (b) China.
(c) Qatar. (d) Saudi Arabia.
35. Keibul Lamjoo is :
- (a) Wildlife Sanctuary. (b) Floating National Park.
(c) Biosphere Reserve. (d) Community Reserve.
36. The head quarters of IRRI :
- (a) Newyork, U.S.A. (b) Paris, France.
(c) Vienna, Austria. (d) Los Banos, Philippines.
37. The use of micro-organism metabolism to remove pollutants such as oil spills in the water bodies is known as :
- (a) Biomagnification. (b) Bioremediation.
(c) Biomethanation. (d) Bioreduction.
38. In which of the following forests of India, world's first tiger census was carried out in 1932 ?
- (a) Kaziranga Forests. (b) Sariska Forests.
(c) Rantham. (d) Palamu Forests.
39. The Washington Convention whose formal name is abbreviated as CITES is related to which among the following ?
- (a) Pesticides. (b) Ozone Depletion.
(c) Endangered Species. (d) Human.

Turn over

40. Earth Hour is organized by _____ ?
(a) UNESCO. (b) Earth Hour Foundation.
(c) World Wildlife Fund. (d) UNEP.
41. Which of the following is the most abundant Green House Gas (GHG) in the earth's atmosphere ?
(a) Nitrogen Dioxide. (b) Carbon Dioxide.
(c) Water Vapour. (d) Sulphur dioxide.
42. Which among the following protocols is also related to the Access and Benefit Sharing (ABS) mechanism ?
(a) Kyoto protocol. (b) Nagoya Protocol.
(c) Geneva Protocol. (d) Cartagena Protocol.
43. Acid rain is capable of damaging the buildings and historic monuments which are made up of rocks such as limestone and marble. Which among the following is the end product of such reaction ?
(a) Quick Lime. (b) Calcium Carbonate.
(c) Calcium Hydroxide. (d) Gypsum.
44. Which among the following chronic lung disease commonly known as 'black lung' disease, leads to reduced life expectancy in coal-miners ?
(a) Pneumoconiosis. (b) Progressive Massive Fibrosis.
(c) Mesothelioma. (d) Collier's Asthma.
45. Which one of the following is a useful biological indicator of Sulphur-dioxide pollution ?
(a) Bryophytes. (b) Lichens.
(c) Pseudomonas. (d) Algal blooms.
46. Which among the following will emit maximum mass of carbon dioxide, when the same quantity is burnt of all of them ?
(a) Gasoline. (b) Natural Gas.
(c) Kerosene. (d) Propane.
47. How many numbers of the Biogeographic zones are present in India ?
(a) 4. (b) 8.
(c) 10. (d) 15.

48. What is the number of Green House Gases, as recognized by the Kyoto Protocol ?
(a) 3. (b) 4.
(c) 5. (d) 6.
49. Which among the following is the first widely used herbicide ?
(a) 2, 4-D. (b) TCDD.
(c) Limonene. (d) Vinegar.
50. In context with the Environment, the price charged to deliver municipal solid waste to a landfill, waste-to-energy facility, or recycling facility is known as _____?
(a) Recycling Fee. (b) Dumping Duty.
(c) Tipping Fee. (d) Material Fee.
51. In which of the following date "World Water Day" is observed ?
(a) March 20th. (b) March 21st.
(c) March 22nd. (d) March 23rd.
52. In which year Project Tiger was launched in India ?
(a) 1973. (b) 1970.
(c) 1992. (d) 1995.
53. In which of the following state in India established the country's first carbon dioxide measurement exchange tower ?
(a) Maharastra. (b) Gujarath.
(c) Kerala. (d) Uttarakhand.
54. National Space Center for "Megha-Tropiques Mission" to study the water cycle in the tropical atmosphere in the context of climate change is located in :
(a) Italy. (b) France.
(c) Germany. (d) Poland.
55. The tendency of biological systems to resist change and to remain in a state of equilibrium is called :
(a) Homeostatis. (b) Feedback mechanism.
(c) Ecological efficiency. (d) Carrying capacity.

Turn over

56. 'Silent Spring' is written by :

- (a) E.Odum.
- (b) Vandhana Siva.
- (c) Rachel Carson.
- (d) Wangari Maathai.

57. Public hearing is conducted :

- (a) Prior to site selection.
- (b) Prior to approval of Terms of Reference.
- (c) After preparation of EIA.
- (d) After environmental clearance.

58. In biological systems sulphur is largely bound in :

- (a) Lipids.
- (b) Proteins.
- (c) Nucleic acids.
- (d) Proteins and nucleic acids.

59. Nalgonda technique of fluoride removal involves the use of :

- (a) Aluminium salts.
- (b) Sodium salts.
- (c) Potassium salts.
- (d) Magnesium salts.

60. Laterite soil contains more of :

- (a) Iron and Aluminium.
- (b) Magnesium and Boron.
- (c) Manganese and Silicate.
- (d) Potassium and Lead.

61. Which among the following is India's largest wildlife sanctuary ?

- (a) Dibang Valley.
- (b) Kedarnath Wild Life Sanctuary.
- (c) Kumbhalgarh.
- (d) Indian Wild Ass Sanctuary.

62. Which among the following is India's first state to release a Climate Change Action Plan ?

- (a) Delhi.
- (b) Himachal Pradesh.
- (c) Haryana.
- (d) Kerala.

63. In which of the following the ecological pyramid of numbers is broad in center ?

- (a) Grasslands Ecosystem.
- (b) Pond Ecosystem.
- (c) Parasitic Food chain.
- (d) Forest Ecosystem.

64. Anuradha Sawhney is well known for her work in which of the following fields ?

- (a) Micro Finance.
- (b) Rainwater harvesting.
- (c) Environment Protection.
- (d) Animal rights.

65. In an ecotone, the species which become abundant are called :
(a) Keystone species. (b) Edge species.
(c) Endemic species. (d) Foster species.
66. A population, from where samples are drawn, is called :
(a) Total population. (b) Target population.
(c) Accessible population. (d) Universal population.
67. Which year was declared as International Year of Biodiversity ?
(a) 2002. (b) 2010.
(c) 2020. (d) 1972.
68. What is Eco - mark ?
(a) Label given to recycled products.
(b) Label given to an environment friendly products.
(c) Land mark indicating the boundaries of bio-parks.
(d) Label given to non-recyclable products.
69. Points Calimere Bird sanctuary is located in which of the following states ?
(a) Kerala. (b) Karnataka.
(c) Tamil Nadu. (d) West Bengal.
70. Which freshwater species is added in the Critically Endangered list by International Union for Conservation of Nature (IUCN) recently ?
(a) White tiger shark. (b) Tor remadevii.
(c) Northern pike. (d) Wels catfish.
71. The Ozone Day is observed every year on September 16 as on this day in 1987 the _____ was signed for launching efforts to arrest the depletion of the fragile ozone layer in the stratosphere that prevents the harmful ultra-violet rays of the sun from reaching the earth.
(a) Montreal Protocol. (b) Geneva Protocol.
(c) Kyoto Protocol. (d) Nagoya Protocol.
72. Which among the following body shows anti-green house effect ?
(a) Mars. (b) Venus.
(c) Jupiter. (d) Titan.
73. What is the name of Japan's new imperial era that was began on May 1, 2019 ?
(a) Showa. (b) Taisho.
(c) Reiwa. (d) Heisei.

Turn over

74. What is Carbon Levy ?
- (a) It's a tax levied on jet and shipping fuel to finance climate change mitigation.
 - (b) It's a tax levied on carbon fuel.
 - (c) It's a tax levied on production of fossil fuel and coal.
 - (d) It's a tax levied on production of coal only.
75. Which country will establish the world's first floating nuclear power plant ?
- (a) Japan.
 - (b) France.
 - (c) U.S.A.
 - (d) Russia.
76. In the E-waste generated by the Mobile Phones, which among the following metal is most abundant ?
- (a) Copper.
 - (b) Silver.
 - (c) Palladium.
 - (d) Gold.
77. Who was named 2019 FWA footballer of the year ?
- (a) Virgil Van Dijk.
 - (b) Lionel Messi.
 - (c) Raheem Sterling.
 - (d) Cristiano Ronaldo.
78. In which country scientists have unearthed 220 million-year-old dinosaurs fossils ?
- (a) Maldives.
 - (b) Canada.
 - (c) Argentina.
 - (d) Russia.
79. The United Nations Security Council (UNSC) unanimously passed the resolution to combat _____.
- (a) Terror funding.
 - (b) Desertification.
 - (c) Biological weapons.
 - (d) Climate Change.
80. What is the name of India's first electronic surveillance satellite ?
- (a) WingSat.
 - (b) Sunsat.
 - (c) Emigran.
 - (d) Emisat.
81. Dodo or *Raphus cucullatus*, a flightless bird which got extinct in the 17th century was endemic to which among the following countries ?
- (a) Sri Lanka.
 - (b) Maldives.
 - (c) Mauritius.
 - (d) India.
82. Which of the following was most probably the first metal to be used in India ?
- (a) Iron.
 - (b) Copper.
 - (c) Gold.
 - (d) Silver.

83. In Stone Age, the Microliths were **most commonly** found in which of the following ages ?
(a) Paleolithic. (b) Mesolithic.
(c) Neolithic. (d) Chalcolithic.
84. The Indian Council of Medical Research recently launched the 'MERA India' to eliminate _____ by 2030.
(a) Malaria. (b) Dengue.
(c) Tuberculosis. (d) Typhoid.
85. Which of the following National Park is called "Topslip" ?
(a) Mukurthi National Park.
(b) Mudumalai National Park.
(c) Indira Gandhi Wildlife Sanctuary and National Park.
(d) Palani Hills National Park.
86. Which gas is most popular as laughing gas ?
(a) Ammonia. (b) Nitrogen dioxide.
(c) Nitric oxide. (d) Nitrous oxide.
87. Cotton fibers are made of :
(a) Suberin. (b) Lignin.
(c) Cellulose. (d) Pectin.
88. The 'Concept of Inertia' was developed by ? was awarded Nobel Prize for his path-breaking research and formulation of the:
(a) Albert Einstein. (b) Galileo.
(c) Newton. (d) Archimedes.
89. Which animal never drinks water in its entire life ?
(a) Kangaroo. (b) Kangaroo rat.
(c) Rat. (d) Hippopotamus.
90. "Fish meal" is widely used as which among the following ?
(a) Cost effective Food. (b) Poultry Feed Additive.
(c) Organic Fertilizer. (d) Bird food.
91. What is the name of the world's first Greenhouse Gases Observing Satellite launched by Japan in 2009 ?
(a) Ibuki. (b) Tadami.
(c) Akatsuki. (d) Hayabusa.

Turn over

92. Which among the following is the unit of measurement of the "Ecological Footprint" ?
- (a) Global Hectare . (b) Gallon Per Capita.
(c) Cubic meter. (d) Man H.
93. Which among the following is the correct location of Tropical Forest Research Institute (TFRI) ?
- (a) Jabalpur. (b) Jodhpur.
(c) Midnapore. (d) Bhopal.
94. Which among the following is the dangerous Green House Gas, created by the Waste Water ?
- (a) Nitrogen. (b) Sulfur Dioxide.
(c) Methane. (d) Carbon Dioxide.
95. Official date of Earth Day is on _____.
- (a) April 22. (b) March 22.
(c) May 22. (d) June 22.
96. Which of the following is considered as major source of pollution in rivers of India ?
- (a) Unregulated small scale industry. (b) Untreated sewage.
(c) Agricultural run-off. (d) Thermal power plants.
97. Which of the following type of natural disaster has no definite beginning and end ?
- (a) Earthquakes. (b) Droughts.
(c) Hurricanes. (d) Landsides.
98. Omicron is :
- (a) Virus. (b) Bacteria.
(c) Fungus. (d) Algae.
99. A virus type that is capable of shifting from one computer to another without user interaction is known as a :
- (a) Worm. (b) Trojan.
(c) Logic bomb. (d) Boot sector.
100. Which among the following expert panel related to recommend steps to preserve and rejuvenate the ecologically sensitive Western Ghats ?
- (a) Devendra Pandey. (b) Dr. Madhav Gadgill.
(c) Dr. M. S. Swaminathan. (d) Dr. Vinod Rishi.